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**A systematic review investigating the association between therapeutic alliance and treatment outcomes when working with individuals with Post-Traumatic Stress Disorder; and a grounded theory study of how clinicians understand Psychosis.**



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**Doctorate in Clinical Psychology**

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**June 2019**

## **DClinPsychol Declaration of Own Work**

**Name:** Laura Corfield

**Title of Work:** A systematic review investigating the association between therapeutic alliance and treatment outcomes when working with individuals with Post-Traumatic Stress Disorder; and a grounded theory study of how clinicians understand Psychosis.

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**Signature** Laura Corfield

**Date** 15/05/2019

## **Acknowledgments**

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## Research Portfolio Abstract

**Introduction.** The therapeutic alliance has been shown to play a key role in improving outcomes when working with children and adults with mental health difficulties. This may be particularly the case for those with a trauma history and subsequent Post-Traumatic Stress Disorder and/or experiences of psychosis. Both of which can be characterised by marked inter-personal difficulties that can impact upon outcome and prognosis. Therefore, this thesis aimed to systematically review literature investigating the impact of therapeutic alliance on trauma-related outcomes when working with children and adults with Post-Traumatic Stress Disorder. It also aimed to construct an explanatory theory of how NHS clinicians, working within both child and adult services, are able to make sense of the difficulties experienced by individuals with psychosis.

**Methods.** Two studies were conducted to address these aims. Study one searched electronic databases to find and systematically review literature on therapeutic alliance when working with children and adults with Post-Traumatic Stress Disorder. A quality assessment of all included studies was conducted, followed by a narrative synthesis. The second study used qualitative methodology in the form of social-constructivist grounded theory. Semi-structured interviews were conducted with fourteen NHS clinicians. An iterative process of data collection and analysis, and theoretical sampling was conducted until theoretical saturation was achieved.

**Results.** The systematic review included nine studies. Evidence was found of a positive association between therapeutic alliance and Post-Traumatic Stress Disorder outcomes. There was not enough evidence to show an association between therapeutic alliance and other mental-health outcomes. Results from the second study indicate that staff can find it difficult to understand psychosis due to specific aspects of psychosis undermining attempts of both staff and service users to form therapeutic relationships. An interactional model details how the 'not knowing' can be maintained and reinforced, further impacting the ability of the staff member to accurately make sense of the individuals' difficulties.

**Conclusions.** Although there appears to be an association between therapeutic alliance and therapeutic outcomes when working with people with Post-Traumatic Stress Disorder, limited research and heterogeneity in the way in which alliance was measured limited the



generalisability of the results. Clinical implications and recommendations for future research are given. Attachment/mentalization-based service approaches are recommended to enhance the ability of clinicians, when working with people with psychosis, to form therapeutic relationships from which accurate and meaningful understandings can be created.

**Total word count:** 14,969

## Research Portfolio Lay Summary

This thesis investigated how the relationship between clinician and client (therapeutic alliance) could impact therapeutic outcomes when working psychologically, with children and adults, with a diagnosis of Post-Traumatic Stress Disorder. It has been well evidenced that therapeutic alliance can positively impact outcomes when working psychologically with individuals with a range of mental-health difficulties. It was hypothesised that alliance may be particularly pertinent for people who have a Post Traumatic Stress Disorder diagnosis as individuals with a history of trauma, particularly complex/inter-personal trauma (trauma involving other people, for example, prolonged physical abuse from a care-giver), are known to have increased difficulties in their relationships with others. Individuals with experience of psychosis are also evidenced to have marked inter-personal difficulties, this may also be due to past and current trauma experiences. This thesis, therefore, also aimed to investigate how clinicians, working in both child and adult services, make sense of the difficulties experienced by those with psychosis given that it can be difficult to engage these individuals into mental health services.

Published studies were reviewed in a systematic manner to find out whether there was a relationship between therapeutic alliance and Post traumatic Stress Disorder outcomes or other outcomes (for example, outcomes relating to depression, anxiety, general mental-health and drop-out rates). Although there did appear to be a positive association between alliance and overall trauma outcomes, i.e. the better the therapeutic alliance the better the outcome, results should be considered cautiously. More research is required to validate these findings as only a limited number of studies were able to be included and reviewed. Additionally, a range of different measures investigating alliance were used within the studies, making it difficult to systematically compile the results that were found.

Through in-depth discussion with fourteen NHS clinicians who work with children and adults with psychosis, it was found that staff can find it difficult to make sense of clients' difficulties. A theory was proposed as to why this might be. One key category and four sub-categories were found that demonstrated how difficulties within the therapeutic alliance can occur which result in staff finding it difficult to 'get to know' the person with psychosis. Results showed that it is the way in which services and staff continue to interact with clients that can maintain or even reinforce the 'not knowing'. Increasing staff anxiety and clients becoming

increasingly 'guarded' in their interactions with staff and services were found to be key themes in why difficulties within the therapeutic alliance can ensue which in turn caused difficulties in staff being able to understand the person's experience of psychosis.

Key findings from this research include the need to consider the differing aspects of the therapeutic alliance during therapy as this will inform future training and supervision around how best to enhance outcomes when working with individuals with experience of trauma and Post-Traumatic Stress Disorder. Additionally, when working with people with psychosis, findings suggest that services should be designed in such a way as to help reduce anxiety levels for staff, thus offering a stable and secure base for therapeutic relationships to be formed with the client. This could aid the understanding between staff and client which could ultimately impact the care provided.

## **Journal Article 1: Systematic Review<sup>1</sup>**

**Therapeutic alliance in psychological therapy for individuals with Post-traumatic Stress disorder: A systematic review.**

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**<sup>1</sup>Written in accordance with submission guidelines for the Journal Clinical Psychology and Psychotherapy (See Appendix 1 for author guidelines).**

## **Therapeutic alliance in psychological therapy for individuals with Post-traumatic Stress disorder: A systematic review.**

### **Abstract**

Therapeutic alliance (TA) is a key predictor of therapy outcomes. Alliance may be particularly pertinent for people who have a Post-traumatic Stress Disorder diagnosis (PTSD), as individuals with a history of trauma, particularly complex trauma, are known to have increased difficulties in their relationships with others. This review aimed to determine (a) the quality of therapeutic alliance between people with PTSD and their therapists; and (b) whether alliance predicts therapeutic outcomes. Databases were searched from inception to November 2018. The search yielded 552 articles, resulting in nine eligible studies, involving nine independent samples. There was evidence of a positive association between alliance and overall PTSD outcomes. There was not enough evidence to conclude an association between alliance and other therapeutic outcomes. Key clinical implications include the need to consider the differing components of alliance during therapy, training and supervision to further enhance outcomes through creation of a good alliance. More research is required to validate these preliminary findings; future studies should be longitudinal with larger samples and should more consistently use pan-theoretical measures of alliance. Variables affecting the quality of alliance also need to be investigated so that they can be more closely targeted during trauma-focussed therapy.

### **Key practitioner message:**

- This is the first review to investigate therapeutic alliance in psychological therapy for individuals (both children and adults) with PTSD.
- Preliminary evidence was found for better alliance predicting overall symptomatic outcome.
- The inconsistent use of pan-theoretical measures of therapeutic alliance, such as the WAI-SF, have led to limitations in our ability to interpret and amalgamate the data.
- Overall there is a lack of studies investigating the impact of TA on outcomes for psychological therapy on PTSD.
- More research investigating the factors that impact TA when working with people with PTSD is needed.

**Keywords:** Therapeutic alliance (TA), Post-traumatic Stress disorder (PTSD), Trauma-Focused therapy (TF-therapy), Trauma-Focused Cognitive Behavioural Therapy (TF-CBT), PE (Prolonged Exposure).

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## Introduction

Trauma-focused psychological therapies, such as Trauma-focused Cognitive Behavioural Therapy (TF-CBT) and Prolonged Exposure (PE) have been found to be effective treatments for PTSD (Bradley et al., 2005; Cloitre, 2009; NIHCE, 2005; Foa, Hembree, & Rothbaum, 2007; Powers, Halpern, Ferenschak, Gillihan, & Foa, 2010). But reviews demonstrate that there still remains a non-response rate of between 25-50% (Bisson et al., 2013; Schottenbauer et al., 2008) with effect sizes of therapy on outcomes being moderate (Seidler & Wagner, 2006). Further research is needed to better understand the processes underlying how and for whom treatment works and the key elements needed to enhance treatment effectiveness and outcomes (Hayes, Hope, & Hayes, 2007). Understanding what leads to change in trauma-focused treatment is a crucial step in enhancing client care (Laurenceau et al. 2007).

There is a growing evidence base to show that stronger therapeutic alliance can lead to improved therapeutic outcomes. This is true for several psychological treatments and mental health difficulties (Flückiger, Del Re, Wampold, Symonds, & Horvath, 2012; Horvath & Symonds, 1991; Horvath, Del Re, Flückiger, & Symonds, 2011). Previous reviews investigating alliance impact have found small positive effect sizes of alliance on psychotherapy outcomes (i.e., Cohen's *d* ranging from 0.21 to 0.24; Horvath et al., 2011).

There is recognition that despite the growing interest in TA as a research area, there is still some ambiguity around the term (Horvath, 2018), and various definitions are used. However, most commonly used, and the one on which most measures of TA appear to be based is Bordin's (1979) pan-theoretical definition of alliance. This conceptualises TA as including three components: i) the bond between client and therapist ii) agreement on therapeutic tasks, and iii) agreement on therapeutic goals.

It has been postulated that adults who have experienced trauma may find it especially difficult to develop a TA (Cloitre, Cohen, & Scarvalone, 2002; DePrince, Combs, & Shanahan, 2009; Meiser-Stedman, Dalgleish, Clucksman, Yule, & Smith, 2009), and therefore, the association between TA and outcomes may be particularly strong in this group. This could be because individuals with a diagnosis of PTSD are more likely to have a co-occurring axis 1 disorder. For example, a recent meta-analysis found that 50% of those with a diagnosis of PTSD had co-existing depression (Rytwinski, Scur, Youngstrom, & Feeny, 2013). Depressive symptoms,

such as reduced inter-personal functioning and lack of motivation, can impact the formation of the therapeutic alliance (Banninger-Huber, 1992). It has also been hypothesised that there might be a stronger association between TA and outcome for those with PTSD due to the mistrust or unresolved attachments borne out of childhood trauma, for example, physical or sexual abuse, which affects interpersonal functioning (Callahan, Price, & Hilsenroth, 2003). Additionally, maladaptive cognitive appraisals may be more common in those with trauma experiences and could mediate the relationship between initial reactions to a traumatic event and later post-traumatic stress (Halligan et al., 2003; Meiser-Stedman et al., 2009). For example, appraisals such as 'I'm going mad' or 'I will never be the same again' were found to have an impact on the maintenance and development of PTSD. Similarly, negative appraisals with regards reactions from others, for example, "nobody is there for me" or future vulnerability "people can't be trusted" may well impact upon the TA and further mediate therapeutic outcomes (Hitchcock, Ellis, Williamson & Nixon., 2015; Spinhoven et al., 2015). TA may also play a key role in the ability of the individual to engage in trauma-focused interventions; when participants are often required to connect with the traumatising event, for example when using PE. This can lead to feelings of helplessness, shame and guilt which can then be difficult to disclose to the therapist (Lee, Scragg, & Turner, 2001), and can lead to treatment drop-out (Keller, Zoellner & Feeny, 2010). For individuals to be able to successfully regulate these emotions, a strong treatment alliance is required (Wampold & Budge, 2012). Therefore, individuals with PTSD, particularly those with a co-morbid Axis 1 disorder, or history of childhood/inter-personal abuse, also known as complex trauma, may find it more difficult to form a TA.

Complex PTSD can be defined as: "Involving traumatic stressors that are repetitive or prolonged; involve direct harm and/or neglect and abandonment by caregivers or ostensibly responsible adults; occur at developmentally vulnerable times in the victim's life, such as early childhood; and have great potential to compromise severely a child's development" (Courtois & Ford, 2009). Effects of complex trauma can include affect deregulation, impaired self-concept, dissociation, somatic dysregulation, and disorganized attachment patterns leading to inter and intra-personal difficulties in adult life (Kessler et al., 2010). Complex trauma has only recently been listed within the ICD-11 (World Health Organization, 2018) as a diagnosis in its own right. As such, most of the trauma literature is yet to delineate between 'simple'



and 'complex' PTSD, this is also true of the literature investigating TA. As a result, there is a lack of evidence as to which therapy is most efficacious within this group. It is recommended, however, that a phase-based approach is taken: the initial development of the TA is crucial before any processing of the traumatic memories can take place (Cloitre et al., 2002). Interventions for complex PTSD are advised to consider firstly stabilisation (for example, establishing safety and improving emotional regulation) before looking at a trauma processing protocol (e.g. PE or EMDR) and reintegration (re-establishing a quality of life through social and cultural interventions; UKPTS, 2016).

Children and young people are also at risk of developing both simple and complex PTSD, with studies of at-risk child populations demonstrating varying prevalence rates from around 3% (Fletcher, 2003) to 36% (Garrison et al., 1995). Due to the impact of a young person's emotional and cognitive development, they may display less re-experiencing and little avoidance behaviour (Fletcher 2003) and more behavioural symptoms of play re-enactment and/or aggression (Yule, 2001), thus making it more difficult to identify PTSD in children than adults. Trauma-focused interventions for younger people may have additional developmental barriers; they may not understand the need for or the process of therapy (DiGiuseppe et al., 1996; Kendall et al., 2009). Having experience of trauma may also add additional complexity where the trauma has occurred in the context of the caregiver-child relationship. The child may find it difficult to trust the therapist (Cloitre et al., 2002; Eltz, Shirk & Sarlin, 1995) and struggle to work through these difficulties with them (Eltz et al., 1995; Ormaugh et al. 2013). Despite this, there is little research investigating the relationship between TA and treatment outcomes for children and youth who have experienced trauma.

Despite the growing number of studies that have evaluated alliance in therapy for trauma, the developing literature has yet to be synthesised. The aim of this paper is to systematically review studies investigating alliance in both children and adults receiving evidence-based trauma-focused psychological interventions. Key objectives are to (a) summarize average alliance ratings across studies, thereby providing a point of comparison for future alliance studies; (b) examine whether alliance predicts therapy outcomes; and (c) assess the methodological quality of included studies.

## **Method**

### ***Search strategy***

A literature search using the following electronic databases was conducted in November 2018: Ovid MEDLINE (1946 - search date); EMBASE (1974 - search date); PsychINFO (1980 – search date); CINAHL (2003 – search date); Google Scholar (no specified start date – search date). The search terminology used was: (trauma\* OR posttrauma\* OR PTSD) AND ("cognitive behav\* therap\*" OR CBT OR "exposure therap\*" OR "eye movement desensiti\*" OR EMDR or psychodynamic\*) AND ("therapeutic alliance\*" OR "therapeutic relationship\*" OR "working alliance\*" OR "psychotherapeutic process\*"). Finally, reference lists from articles were reviewed.

This search resulted in 580 citations leaving 552 citations when duplicates were removed. 514 studies were excluded following the title and abstract search. The lead author screened the remaining 38 citations at a full-text level against specified inclusion criteria. Inclusivity was discussed with the research team, resulting in 9 included articles (see Figure 1).

### ***Eligibility criteria***

No date restrictions were applied, and unpublished theses were included in a bid to reduce publication bias.

### ***Inclusion criteria***

The inclusion criteria were as follows:

1. sample with either a PTSD diagnosis or significant PTSD symptoms (child studies only);
2. a validated measure of alliance between client and therapist;
3. a validated measure of PTSD outcome;
4. clients receiving trauma-focused psychological therapy;
5. English language.

### ***Exclusion criteria***

The exclusion criteria were as follows:

1. Studies including participants with current psychosis or other Serious Mental Illness (SMI);
2. studies including participants with current substance dependence;
3. studies where interventions were delivered via internet.

See below for further details regarding inclusion and exclusion criteria.

### ***Population***

There were no age limits applied so that studies focusing on trauma interventions for children and adolescents could also be included. 'Child studies' were those that included participants who were under 18 years old and 'adult studies' included participants who were 18 years and older. A broader spectrum approach, for PTSD diagnosis, was adopted due to the inclusion of child studies (see below).

Adult studies were included if their target population was individuals who met diagnostic criteria for a primary Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition, Text revision (DSM-IV-TR; American Psychiatric Association [APA], 2000) diagnosis of PTSD. Child studies were included where the target population met criteria for a diagnosis of PTSD OR where the participants were deemed to have subthreshold PTSD or PTSS (Posttraumatic stress symptoms) as a main mental health problem. The review included sub-threshold PTSD and PTSS as studies with child participants rarely require that children meet the full threshold for PTSD. This is due to there being no clear consensus about the typical presentation of PTSD (Carr, 2004; Gillies et al., 2012; Salmon & Bryant, 2002). Sub-threshold PTSD required two out of the three avoidance symptoms and a total score equal to or greater than 14 on the Child Posttraumatic Stress Scale-Interview (CPSS; Foa, Johnston, Feeny & Treadwell, 2001; Gillihan, Aderka, Conkin, Capaldi & Foa, 2013). Studies including participants with PTSS required that included participants had experienced a history of one or more traumatic events and scored clinically on a validated PTSD symptom severity scale.

### *Intervention*

Studies were included where the participants were receiving a trauma-focused psychological therapies intervention. Studies were excluded if the intervention was not cited as evidence-based within the MATRIX (2015; A Scottish government clinical practice guideline for delivering evidence-based psychological interventions). Interventions delivered over the internet were also excluded.

### *Design*

Studies were included if they were empirical, reported quantitative data and had outcomes at more than one time point (e.g. minimum pre and post).

### *Outcomes*

Studies were included if they had a validated measure of both symptomatic outcomes of PTSD and of therapeutic alliance. Studies were excluded if they did not report the relationship between PTSD outcome and therapeutic alliance. Where other outcomes were measured in relation to TA e.g. symptoms of depression these were reported but only if they were additional to a PTSD measure.

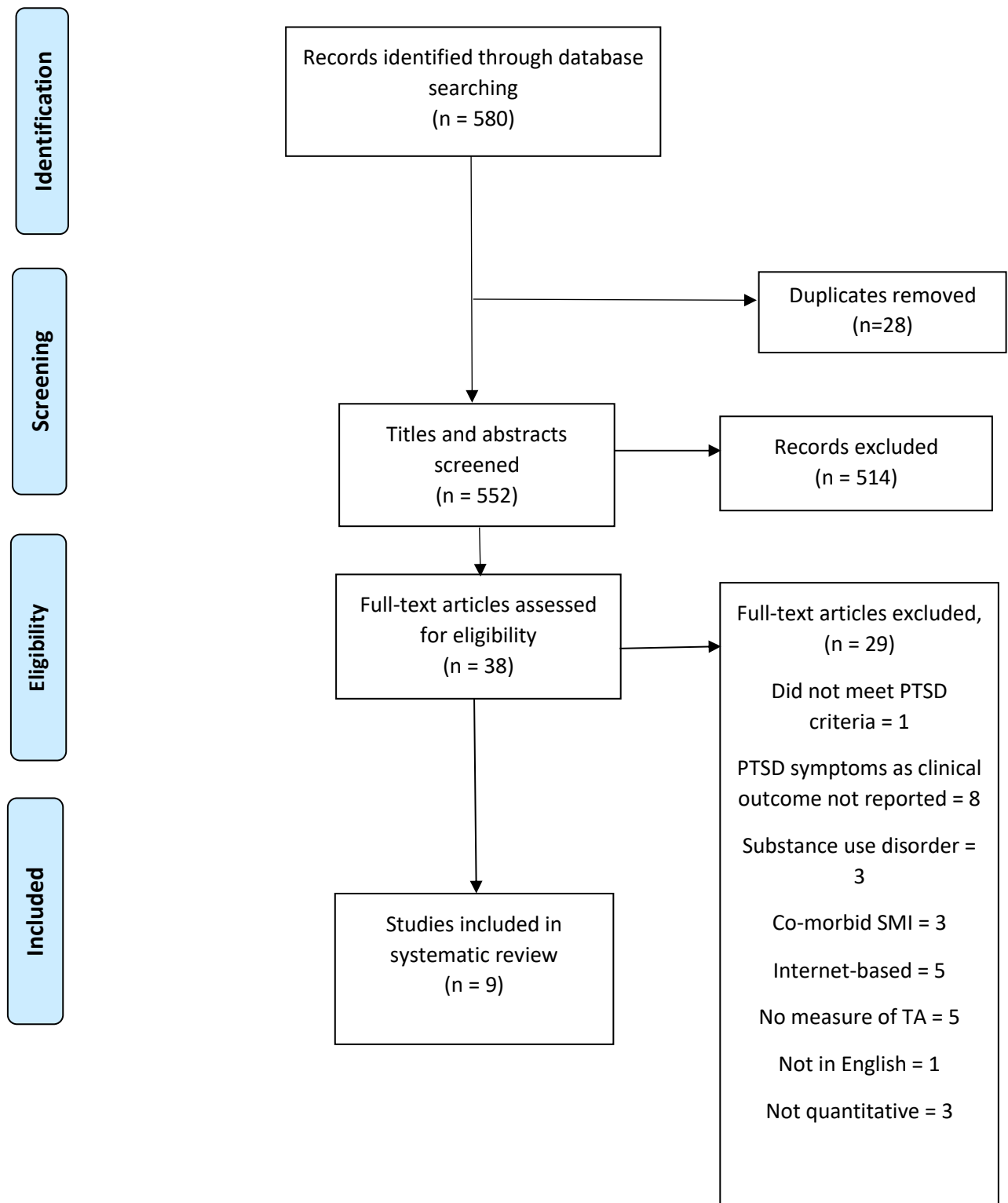
### ***Data synthesis***

Significant methodological heterogeneity of the studies with regards the measurement of PTSD outcomes and measures of TA meant that it was not appropriate to conduct a meta-analysis. A narrative synthesis of the literature (Mays, Roberts & Popay, 2001) was conducted instead. Where possible the effect sizes of individual studies were reported. Where effect sizes were not reported but the  $\beta$  statistic was, the lead author utilised Peterson and Brown's (2005) formula:  $r = \beta + .5\lambda$ , where  $\lambda = 1$ , on occasions when  $\beta$  is a positive value, in cases where  $\beta$  value was  $\pm 0.5$  to calculate the effect size. If the Pearson's  $r$  was not directly reported, authors were first contacted to see if they had this data available. Where it was not possible to report the effect size, other relevant statistics were reported.

### ***Quality assessment***

To assess the methodological quality of the included studies, the Effective Public Health Practice Project (EPHPP) Quality Assessment Tool for Quantitative Studies (Thomas, 2003) was utilised. This tool has been found to have good rates of reliability and validity (Armijo-Olivo, Stiles, Hagen, Biondo, & Cummings, 2012; Thomas, Ciliska, Dobbins, & Micucci, 2004). The lead author and a post-graduate doctoral student independently rated all included studies. Overall a good rate of inter-rater reliability was found (89.4% level of agreement,  $k=0.76$ ). Discrepancies were discussed until 100% agreement was reached.

**Figure 1.** PRISMA flowchart



## Results

There were six studies investigating adult TA and three studies investigating child TA including within the review.

A range of measures were utilised by the studies to assess TA. In the adult participant studies, average alliance ratings were reported in five out of the six studies. All child participant studies reported average ratings. Due to the variation in the way in which the TA was reported, it was not possible to calculate reliable mean TA ratings between studies. See table 1 for an overview of TA measures used and reported average alliance ratings for each study.

### *Measures of therapeutic alliance utilised*

Alliance was most frequently assessed (adult studies, n=3; child studies n=2) using a version of the Working Alliance Inventory-Short Form (WAI-SF; Hatcher & Gillaspie, 2006; Horvath & Greenburg, 1989; Tracey & Kokotovic, 1989).

All versions of the WAI-SF were adapted from the original 36-item WAI (Horvath & Greenburg, 1989), have 12 items and can assess three dimensions of the working alliance (WA). The 'Bond' subscale measures the bond between the therapist and client; the 'Goals' subscale measures the agreement between therapist and client on goals for therapy and the 'Tasks' subscale measures the agreement between therapist and client on the tasks needed to achieve the goals. An overall score or scores for each sub-scale can be calculated. Only Hoffart et al. (2013) reported on the individual subscales/ WA dimensions.

The WAI-SF (Horvath & Greenburg, 1989) version has a Likert scale that ranges from 1-7, where 1 is 'never' and 7 is 'always'. The total score can range from 12-84. The WAI-SF has been found to have excellent internal consistency and reliability (Horvath & Greenburgh, 1989; Hanson, Curry & Bandalos, 2002). The Tracey & Kokotovic (1998) version follows the same format, but has a score range of 0-7. The WAI-Short Revised (WAI-SR; Horvath & Greenberg, 1989) was also utilised. It has been found to differentiate well between the three components of the WAI and has shown high internal consistency and reliability; it also correlates highly with other alliance measures (Hatcher & Gillaspie, 2006). Finally, the WAI

Observer Version-Short Form (WAI-O-SF; Horvath and Greenburg, 1989) was used. It was adapted to be rated from the observer perspective. It has been found to have good reliability and validity (Horvath, 1994). Based on recommendations from the analysis of CBT sessions (Andrusyna, Tang, DeRubeus & Lubrosky, 2001), Brady, Warnock-Parkes, Barker & Ehlers (2015) who utilised this measure, reported on two constructs 'Agreement/confidence' and 'Relationship'. 'Agreement/confidence' measures how much the therapist and client agree on goals and tasks and 'Relationship' measures the bond between therapist and client.

Three other measures of TA were utilised by the studies. The California Psychotherapy Alliance Scale (CALPAS; Marmar, Weiss & Gaston, 1989) is a 24-item self-report measure. Each item describes the relationship between therapist and client and is rated from 1-7, 1 being 'not at all' and 7 being 'very much so'. The items aim to capture the client's commitment to therapy, their capacity to undertake the work and the agreement on tasks and goals. The measure has been found to have similar psychometric properties to the other TA measures cited (Horvath & Luborsky, 1993). An average score is calculated. Adequate internal consistency has been found (Gaston, 1991). The Helping Alliance Questionnaire-II (HAQ-II; Luborsky et al., 1996) was also used; it is a 19-item self-report measure of alliance. Each item is rated between 1 ('I strongly feel it is true') and 6 ('I strongly feel that it is not true'). It has excellent internal consistency and test-retest reliability, as well as good convergent validity with the CALPAS (Luborsky et al., 1996). Finally, the Therapeutic Alliance Scale for Children-Revised (TASC-R; Shirk, 2003) was used; it is an alliance scale that has been developed specifically for children and adolescents. Consisting of 12 items, it measures emotional components (e.g. "I like my therapist") and level of collaboration on tasks. A four-point scale is used where 1 is 'not at all' and 4 is 'very much'. The scale has been found to have good reliability, temporal stability and convergent validity (Accurso et al., 2012).

For all TA measures, higher ratings represent better therapeutic alliance. None of the scales have norms or classification systems although CALPAS ratings above four are considered indicative of "good" quality alliance (Delsignore et al., 2014).



**Table 1.** Overview of alliance measure used and reported average alliance ratings

Study, (Adult or child participants)	Measure of alliance (version cited)	Components of TA measured	Version cited/ Score range or version used	Alliance perspective	Time measured: Average rating, mean (SD)
<b>Brady et al. (2015), Adult participants.</b>	WAI-O-SF (Horvath and Greenburg, 1989)	TA agreement & TA relationship	12-84	Observer	Good responders: TA agreement – 49.29 (8.45) TA relationship – 17.82 (2.04) Total – 67.11 (10.49) Poor responders: TA agreement – 45.29 (9.21) TA relationship – 17.75 (2.44) Total – 63.04 (11.65)
<b>Cloitre &amp; Chemtob (2004), Adult participants.</b>	WAI-SF (Tracey & Kokovic, 1998)	Full	0-7	Client	Phase 1 (sessions 3, 4 & 5) – 6.3 (0.6) Phase 2 (sessions 9-16) – 6.4 (0.7)
<b>Hoffart, Langkaas &amp; Wampold (2013), Adult participants.</b>	WAI-SR (Hatcher & Gillaspie, 2006)	Bond, goal & task	0-7	Client	Week 2: Bond      5.14    (1.34) Goal      5.65    (1.12) Task      5.33    (1.17) overall    5.37    (3.66)
<b>Theodore (2015), Adult participants.</b>	WAI-SF	No average alliances reported			

<b>Capaldi et al. (2016), Child participants.</b>	WAI-SF (Horvath & Greenberg, 1989)	Full	12-84	Client	Session 3 – 70.3 (7.5) Mid treatment – 76.1 (7.2) Post treatment – 75.7 (7.3)
<b>Kirche et al. (2018), Child participants.</b>	WAI-SF (Tracey & Kokotovic, 1989)	Full	12-84	Client and caregiver	Session 3: Client – 72.33 (9.89) Caregiver - 76.33 (6.49)
<b>Flannagan et al. (2018), Adult participants.</b>	HAQ (Luborsky et al. 1996)	n/a	0-114	Client	End of treatment: 105.57 (9.62)
<b>McLaughlin, Youngstrom &amp; Zoellner (2014), Adult participants.</b>	CALPAS (Marmar, Weiss, & Gaston, 1989)	n/a	0-7	Client	Overall: 5.86 0.66 Session: 2 5.63 (0.77) 4 0.67 (0.79) 6 5.89 (0.81) 8 5.93 (0.84) 10 6.1 (0.73)
<b>Ormhaug et al. (2014), Child participants.</b>	TASC-R (Shirk, 2003)	n/a	0-48	Client	Session 1 – 38.9 (6.4) Mid-treatment – 38.2 (7.7)

Note. HAQ = The helping alliance questionnaire; WAI-S = Working Alliance Inventory-Short Form; CAPS = The Clinician Administered PTSD Scale; CALPAS = California Psychotherapy Alliance Scale CALPAS; TASC-R = Therapeutic Alliance Scale for Children-Revised.

### ***Study characteristics***

Tables 2 and 2a present study characteristics and key findings.

The studies included within this review were conducted between 2004 and 2018 in the USA (five studies, 56% of total sample), Norway (two studies, 22%), Germany (one study, 11%) and the UK (one study, 11%). Six adult studies and three child studies were included. Eight out of the nine studies included within the review were longitudinal in design in that TA and outcomes were measured at multiple points over time. These studies were all randomised controlled trials (RCT). Brady et al. (2015) utilised a different design whereby a group receiving TF-therapy was retrospectively analysed and grouped as 'poor' or 'good' treatment responders. For the purpose of this review, where an RCT was conducted, results are reported for the active, TF-therapy treatment arms.

The majority of the studies (n=7) included a range of trauma experiences. Only two studies had 100% of participants who would receive a complex trauma diagnosis (Cloitre & Chemtob, 2004; Capaldi, Asnaani, Zandberg, Carpenter & Foa, 2016). Due to research suggesting that the effects of TA may differ depending upon the type of trauma experienced, particularly for those experiencing complex PTSD opposed to simple PTSD (e.g. witnessing a one-off RTA/event), the percentage of those experiencing complex trauma was presented for each study. Adult studies included an average of 62.66% complex trauma and the child studies an average of 79.4% complex trauma.

Three studies also reported TA associations with depression outcomes in addition to PTSD outcomes (Cloitre & Chemtob, 2004; McLaughlin, Youngstrom & Zoellner, 2014; Flannagan, Sippel, Wahlquist et al., 2018). One further study reported depression, anxiety and general mental health outcomes (Ormhaugh, Jenson, Wentzel-Larsen & Shirk, 2014).

In all adult studies, therapy was delivered on an individual basis. All child studies also involved care-givers within treatment. All studies were drawn from independent samples.

**Table 2.** Study characteristics of adult studies

Author, year; country	Design and Intervention	PTSD inclusion criteria	N	Age; years (SD)	Gender (% female)	Type of trauma (% interpersonal)	Co- morbidity	Alliance measure	Alliance perspective	Key measures
<b>Cloitre &amp; Chemtob (2004); USA</b>	Based on results from an RCT; STAIR (phase- based trauma intervention combining emotional management, IP skills and PE)	All ppts met DSM- IV criteria for PTSD	49	34 (7.22)	100	100 % Interpersonal trauma	53% MD 44% GA 18% P.D	WAI	Client	MPSS–SR NMR
<b>Hoffart et al. (2013); Norway</b>	RCT, therapy arms IE and IR. Residential care.	All ppts met DSM- IV criteria for PTSD	65	45.2 (9.7)	58.5	74.9% interpersonal trauma 25.1% war-related trauma	NR	WAI-SR	Client	PSS-I PSS-SR
<b>Flannagan et al. (2018); USA</b>	RCT, therapy arms PE and PE with oxytocin; outpatient	All ppts met DSM- IV criteria for PTSD	9	45.78	22.2	23.5% interpersonal trauma 47.1% combat exposure 29.4% one of traumatic event	NR	HAQ	Client	CAPS PCL BDI
<b>Brady et al. (2015); UK</b>	Retrospective comparison of 'good	All ppts met DSM-	58	39.2 (11.4)	43%	55.9% interpersonal trauma	NR	WAI-O-S	Observer	PDS

	responders' and poor responders'	IV criteria for PTSD				5.2% Witnessed harm to others 32.4% Accident 2.9% Other				
	TF-PTSD based on Ehlers & Clark's model of PTSD (2000)									
<b>Theodore (2015); USA</b>	Data from RCT, out-patient. PE- (Immediate) & PE-D (delayed)	All ppts met DSM-IV criteria for PTSD	50	38 (10.29)	70%	NR other than sample includes veterans and civilians.	NR	WAI-SF at sessions 3, 6, 9, and 12	Client and therapist	CAPS Drop-out rates
<b>McLaughlin et al. (2014); USA</b>	RCT with PE treatment arm; out-patient.	All ppts met DSM-IV criteria for PTSD	116	36.60 (11.30)	75.7%	59% IP trauma 14% motor vehicle/other serious accident 2% combat-related event 6% unexpected death of a loved one.	50% MMD	CALPAS	Client	PSS-SR BDI

Note. NR = Not reported; PDS = Posttraumatic stress diagnostic scale; MPSS-SR = Modified PTSD Symptom Scale—Self Report (Resick, Falsetti, Resnick, & Kilpatrick, 1991); PSS-I = PTSD Symptom Scale Interview; PSS-SR = PTSD Symptom Scale—Self report; NMR = Negative Mood Regulation scale (Catanzaro & Mearns, 1990); BDI = Beck Depression Inventory; HAQ = The helping alliance questionnaire; WAI-S = Working Alliance Inventory-Short Form; CAPS = The Clinician Administered PTSD Scale; CALPAS = California Psychotherapy Alliance Scale CALPAS; MD = Major Depression; GAD = Generalized Anxiety Disorder; P.D = Panic Disorder with or without agoraphobia; MMD = Major Mood Disorder, IP skills = Interpersonal skills; PE = Prolonged Exposure

**Table 2a.** Study characteristics of child studies

Author, year; country	Design & Intervention type	PTSD inclusion criteria	N	Age; years (SD)	Gender (% female)	Type of trauma (% interpersonal)	Co-morbidity	Alliance measure	Alliance perspective	Key measures
<b>Capaldi et al. (2016); USA</b>	RCT; therapy arms PE-A & CCT, outpatient Referrals from local crisis centre	Participants had to have a diagnosis of chronic or subthreshold PTSD related to sexual abuse. Subthreshold PTSD required only two of three avoidance symptoms and a total score= 14 on the CPSS	61 (total) 31 (PE-A) 30 (CCT)	PE-A: 15.4 (1.3) CCT: 15.3 (1.7)	100	100% interpersonal trauma	NR	WAI-S	Client	CPSS
<b>Kirche et al. (2018); Germany</b>	Data from RCT with TF-CBT treatment arm, includes components of PE; outpatient. Caregivers involved in treatment	PTSS as main mental health problem with a total symptom severity score ≥ 35 points on the Clinician Administered PTSD Scale for	65 patients & 65 caregivers	12.52 (2.90; 7–17)	67.7	77% interpersonal trauma 23% other (death of a loved one, war, neglect)	29.2% More than one DSM-V co-morbidity (including depression)	WAI-S	Client and caregiver	CAPS-CA

		Children and Adolescents (CAPS-CA)								
<b>Ormhaug et al. (2014); Norway</b>	RCT with TF- CBT treatment arm; outpatients Caregivers involved in treatment	66.9% met diagnostic criteria for PTSD. All participants reported clinically elevated symptoms of PTS, as assessed using the CPSS.	156	15.1 (2.20), range = 10–18	79.5	61.1% interpersonal trauma 16.6% Traumatic loss Accidents/hospita lization 2.7% War/refuge	72.8% scored above clinical cut- off for depression 66.4% above cut off for anxiety (Screen for Child Anxiety Related Disorders	TASC-R	Client	CPSS (client) CAPS-CA (clinician).  Depressive symptoms: MFQ, Anxiety symptoms: SCARED, General mental health: SDQ

Note. NR = Not reported; Child Posttraumatic Stress Scale-Interview (CPSS; Foa, Johnson, Feeny, & Treadwell, 2001; Gillihan, Aderka, Conklin, Capaldi, & Foa, 2013); CAPS-CA = The Clinician Administered PTSD Scale for Children and Adolescents; PE-A = Prolonged Exposure for adolescents; CCT = Client-centred therapy; MFQ = The Mood and Feelings Questionnaire (Angold et al., 1995); SCARED = The Screen for Child Anxiety Related Disorders; SDQ = The Strengths and Difficulties Questionnaire (Goodman, 2001); WAI-S = Working alliance-Short; TASC-R = Therapeutic Alliance Scale for Children-Revised.

### ***Quality assessment***

Please see tables 3 and 3a, where the quality assessment for each study is summarised.

Overall, poor reporting of participants agreeing to participate meant that only two out of the nine studies received a strong rating for selection bias, all remaining studies achieved a moderate rating. All except one study (Brady et al., 2015) scored a strong rating for study design, due to being an RCT design that was clearly stated. Most studies (n=8) considered and or/controlled for confounders and so received a strong rating. One study received a weak rating due to not reporting control of confounders within the study. Most studies received a moderate rating for blinding due to blinding of the assessors but it not being clear whether participants were blinded to the research question. One study received a weak rating due to it not reporting any blinding procedures. All studies utilised valid and reliable measures of outcome and TA and therefore scored strong ratings for data collection methods (n=9). In the main, withdrawals and dropouts were well reported with 60% or more of participants completing the study, most studies scoring a moderate or higher rating (n=8); one study scored a weak rating due to this not being reported. All studies ensured participants received the intended intervention, with 80% or higher of all participants receiving the complete intervention. Similarly, the analysis utilised appeared to be appropriate in all studies, although there was a tendency for missing data not to be discussed.



**Table 3.** Quality ratings of adult studies

Effective public health practice project (EPHPP) for quantitative studies (Thomas, 2003).

Author	Selection bias	Design	Confounders	Blinding	Data collection methods	Withdrawal and dropouts	Global rating
<b>Cloitre &amp; Chemtob, (2004)</b>	Moderate	Strong	Strong	Moderate	Strong	Moderate	Strong
<b>Hoffart et al. (2013)</b>	Strong	Strong	Strong	Moderate	Strong	Strong	Strong
<b>Flanagan et al. (2018)</b>	Moderate	Strong	Strong	Moderate	Strong	Strong	Strong
<b>Brady et al. (2015)</b>	Moderate	Weak	Strong	Moderate	Strong	Moderate	Moderate
<b>Theodore, 2015</b>	Moderate	Strong	Strong	Weak	Strong	Strong	Moderate
<b>McLaughlin et al. (2014)</b>	Moderate	Strong	Weak	Moderate	Strong	Weak	Weak

Note: Each domain was rated either “weak”, “moderate,” or “strong.” Papers were assigned an overall rating of “strong” (no “weak” domain ratings), “moderate” (one “weak” domain rating), or “weak” (more than one “weak” domain rating). M = moderate; N/A = not applicable; S = strong; W = weak.

**Table 3a.** Quality assessment ratings for child studies

Author	Selection bias	Design	Confounders	Blinding	Data collection methods	Withdrawal and dropouts	Global rating
Capaldi et al. (2016)	Strong	Strong	Strong	Moderate	Strong	Strong	Strong
Kirche et al. (2018)	Moderate	Strong	Strong	Moderate	Strong	Strong	Strong
Ormhaug et al. (2014)	Moderate	Strong	Strong	Moderate	Strong	Moderate	Strong

Note: Each domain was rated either “weak”, “moderate,” or “strong.” Papers were assigned an overall rating of “strong” (no “weak” domain ratings), “moderate” (one “weak” domain rating), or “weak” (more than one “weak” domain rating). M = moderate; N/A = not applicable; S = strong; W = weak.

**Table 4.** Adult studies; Key findings and effect sizes (ES).

Study	Alliance	Alliance measured	Symptomatic outcome	Outcome measured	Other outcomes	Outcome measured	TA and PTSD outcomes	TA and other outcomes
<b>Cloitre &amp; Chemtob, (2004)</b>	Client WAI	Session 3,4 & 5	MPSS–SR	Pre, mid and post trial	NMR	Change score calculated by end (session 16) – mid (session 8) of therapy.	<p>Client WAI was significantly and negatively related to PTSD symptoms at the end of treatment.  <math>r(30) = -0.46, p &lt; .01</math>.  <b>Moderate ES.</b></p> <p>This relationship was mediated by participants' improved capacity to regulate negative mood states in the context of Phase 2 exposure therapy.</p>	<p>Stronger client reported TA was related to improvement in NMR between mid and posttreatment assessments.</p> <p><math>r(31) = 0.34, p &lt; 0.05</math> (one tailed). <b>Moderate ES.</b></p>
<b>Hoffart et al. (2013)</b>	Client WAI (SR)	All sessions, weeks 1 – 10.	PSS-I	Pre and post treatment	-	-	<p>The task component of the WAI was found to be associated with outcome  <math>r = -0.23</math>. <b>Small ES.</b></p> <p>The goal and bond components of the WAI were not significant.</p> <p>The effect of TA appeared to be stronger in the IE group compared to the IR group.</p>	-

<b>Flanagan et al. (2018)</b>	Client HAQ	Session 5 & 10	CAPS-5	Baseline, and session 10.	PCL BDI	Session 5 and session 10	Session 5 Client HAQ was correlated with Session 5 CAPS ( $r=-.597, p=.03$ ). <b>Moderate ES.</b> Neither Session 5 nor session 10 Client HAQ scores were associated with end of treatment CAPS' score.	Neither Session 5 nor session 10 Client HAQ scores were associated with end of treatment PCL or BDI scores.
<b>Brady et al. (2015)</b>	Observer WAI-S	First or second session	PDS	Post treatment (poor responders v's good responders)	-	-	There was a group difference in the 'agreement' factor of TA with good responders group scoring higher. <b>Moderate to large ES.</b>  F (1,51) = 4.05, $p=.050$ , partial $\eta^2=.073$ .  There was no significant difference in the relationship factor of TA.  F (1,51) = 0.88, $p=.353$ , partial $\eta^2=.017$	-
<b>Theodore, (2015)</b>	Client and therapist WAI-S	Sessions 3, 6, 9, and 12	CAPS PCL	1 month and 6 months post treatment	Treatment drop out (PE-I group only)	Session 3 (TA)	There was no significant association found between client or therapist WAI and outcome.	Early TA was associated with a decrease in dropout rates in the PE-I group ( $p = 0.049$ ).

<b>McLaughlin et al. (2014)</b>	Client CALPAS	Sessions, 2,4,6,8 & 10	PSS-SR	Pre and post treatment	BDI	Pre and post treatment	<p>An association was found between Client CALPAS and PTSD outcome.</p> <p><math>r(80) = -0.37, p = 0.001</math>.</p> <p><b>Moderate ES.</b></p> <p>Using regression analyses: Alliance was found to significantly predict post-treatment PTSD scores.</p> <p><math>F(3, 79) = 5.21, p = .003, R^2 = .17</math></p> <p>A higher overall mean alliance score was a significant predictor of a lower PTSD severity at posttreatment (<math>B = -0.33, p = .01</math>).</p>	<p>Using regression analyses:</p> <p>Alliance was not found to significant predict post-treatment Depression scores.</p> <p><math>F(3, 79) = 2.08, p = .11, R^2 = .08</math>.</p>
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Note. CAPS = The Clinician Administered PTSD Scale; PCL = PTSD Checklist; PSS-SR = PTSD Symptom Scale–Self-Report; PSS-I = PTSD Symptom Scale–Interview; PDS = Posttraumatic stress diagnostic scale; PE-I = Prolonged exposure-interrupted; WAI-SF = Working alliance inventory-short form, CALPAS = California Psychotherapy Alliance Scale; HAQ = Helping Alliance Questionnaire; BDI = Beck Depression Inventory

**Table 4a.** Child studies; Key findings and effect sizes (ES).

Study	Alliance	Alliance measured	Symptomatic outcome	Outcome measured	Other outcomes	Outcome measured	TA and PTSD outcomes	TA and other outcomes
<b>Capaldi et al. (2016)</b>	Client WAI-S	Session 3, mid (session 8) and post-treatment	CPSS	Pre, mid (session 7) and post treatment	-	-	<p>Client TA was significantly associated with better treatment outcome overall.</p> <p><math>r = -0.29, p = .039</math>. <b>Moderate ES.</b></p> <p>Using generalised LMM analysis: A significant moderating effect of WAI on CPSS was found:</p> <p><math>(B = -1.21) t(137) = -2.72, p = .007</math></p>	-
<b>Kirche et al. (2018)</b>	Client and caregiver WAI-S	Mid and post treatment	CAPS-CA	Pre and post treatment			<p>No significant association between TA and PTSD outcome was found.</p> <p>However, using path analysis, caregivers' working alliance (but not clients TA) was related to post-treatment outcome. <math>(\beta = -0.533, p &lt; 0.001;</math> difference score <math>B = 1.100, SE B = 0.522, \beta = 0.335, p = 0.031)</math></p>	-

<b>Ormhaug et al. (2014)</b>	TASC-R	Sessions 1 & 6	CPSS CAPS-CA (clinician)	Pre-treatment, mid-treatment (Session 6), and posttreatment (Session 15)	MFQ (Depression) SCARED (anxiety) SDQ (General mental health)	Pre-treatment, mid-treatment (Session 6), and posttreatment (Session 15)	Client TA was found to be associated with PTSD symptom reduction (r=-0.35, p=0.13). <b>Moderate ES.</b>	Client TA was found to be associated with a reduction in:  Depression (MFQ); r=-0.32. <b>Moderate ES</b> anxiety (SCARED); r=-0.35. <b>Moderate ES</b> and general mental health, (SDQ); r=-0.36. <b>Moderate ES</b>
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Note. CPSS = Client symptom scale and impairment scale; CAPS-CA (clinician) = The Clinician Administered PTSD Scale for Children and Adolescents; TASC-R = Therapeutic Alliance Scale for Children; WAI = Working alliance inventory; Questionnaire; MFQ = The Mood and Feelings Questionnaire; SCARED = Screen for Child Anxiety Related Disorders; SDQ = The Strengths and Difficulties

### ***Relationship between alliance and outcome***

Overall, there appeared to be a trend towards there being an association between TA and PTSD outcomes, specifically that a positive therapeutic relationship predicts better post-treatment PTSD outcomes. Please see tables 4 and 4a for effect size statistics and key findings for the relationship between alliance and outcome across all included studies.

### ***Adult study findings***

Findings from five out of the six adult studies suggested a relationship between TA and PTSD outcomes (Brady et al. 2015; Cloitre & Chemtob, 2004; Flannagan et al. 2018; Hoffart et al. 2013; McLaughlin et al. 2014). Cloitre and Chemtob (2004), McLaughlin et al. (2014) and Flannagan et al. (2018) found moderate effect sizes (-0.47, -0.37 & -0.60 respectively). These results support the notion that increased TA leads to improved outcomes, higher than found in studies investigating the impact of TA on outcomes in other clinical populations (Horvath & Greenberg, 1986; Horvath & Symonds, 1991; Martin et al. 2000). The effect sizes highlight the importance of TA when working psychologically with people with PTSD, particularly where the PTSD is related to childhood sexual abuse (Cloitre & Chemtob, 2004; McLaughlin et al., 2014). Cloitre and Chemtob (2004), in addition to finding that early alliance predicted PTSD outcomes, found that this relationship was mediated through the ability of the client to regulate their negative mood state. This was hypothesised to be important given the emotionally intense nature of exposure therapy. So, it was hypothesised that through the development of a stronger TA, the client was more able to engage in PE leading to improved treatment outcomes (Foa et al., 2013). It is worth noting that Cloitre and Chemtob (2004) employed an all-female sample so these results may not generalise to male participants. However, the other studies using mixed gender samples also found similar effect sizes. These results support research showing that TA is an important construct in facilitating good treatment outcome in sexually abused adults (Keller et al., 2010; Lawson, Stulmaker & Tinsley, 2017; Hembree et al., 2003).

Although Flannagan et al. (2018) found a moderate association between session five client TA ratings and session five PTSD symptom ratings ( $r=-.60$ ,  $p=.03$ ), neither session five or ten TA



ratings were significantly associated with post-treatment PTSD symptomology. The study, however, had a small sample size with participants reporting uniformly high HAQ ratings across the sample therefore reducing the range of scores. This may make it more difficult to find an association between TA and outcome (Crawford et al., 2018). Flannagan et al. (2018) also suggest that the non-significant results may be due to participants being able to distinguish their levels of distress from the rapport with their therapist. Compared to the previously mentioned studies, Flannagan et al. (2018) included a relatively small percentage of individuals who had experienced complex trauma (23.5% compared to 100% and 75%). It may be that although TA is important for allowing the participant to engage in the emotionally taxing elements of PE, it is less crucial for overall engagement with the therapist (Courtois & Ford, 2013; Keller, Zoellner, & Feeny, 2010). Results from Hoffart & Wampald (2013) and Brady et al. (2015) may also support the notion of the importance of the TA in aiding the client to engage in TF-therapies, such as PE, where the client is required to re-engage with their trauma experiences. Through investigating the separate dimensions of the TA they found that agreement and confidence in the goals and tasks of therapy were significantly associated with outcome but the specific bond/relationship components were not. This indicated that whilst higher quality of collaborative working relationship led to better outcomes, the overall emotional relationship did not.

McLaughlin et al. (2014) also found a significant association between TA and outcome. Further, they found that the presence of an unrepaired therapeutic rupture within the TA, predicted worse PTSD treatment outcomes ( $B=10.88$ ,  $p<0.001$ ,  $95\%CI [5.15,16.63]$ ), with the no-rupture group reporting the lowest PTSD severity (PSS-SR) at post-treatment ( $M= 10.04$ ,  $SD = 8.20$ ), followed by the repaired rupture group ( $M = 12.45$ ,  $SD = 9.84$ ). The unrepaired rupture group reported the highest post-treatment PTSD severity ( $M =19.06$ ,  $SD = 11.48$ ). These results further support the notion of establishing a strong alliance across trauma-related therapy in order to improve treatment outcomes; it also highlights the importance of attending to ruptures in alliance. This may be particularly pertinent within TF-therapies where the client is repeatedly asked to re-engage with the trauma so increasing the likelihood of heightened affect and therapeutic rupture (Ulman, 1996). This is highlighted by the finding within the study that 46% of the sample experienced a significant drop in the TA over the

course of PE. Repairing alliance ruptures may be crucial for allowing the client to move on successfully in therapy.

Theodore (2015), although finding that TA might predict outcome on a trend level, did not find a significant relationship between TA and PTSD outcome. This study, however, had a relatively small sample size therefore reducing its power to find a significant association.

### *Other outcomes*

Three adult studies also reported associations between TA and depression outcomes (Cloitre et al., 2004; McLaughlin et al., 2014 & Flannagan et al., 2018). Only Cloitre et al. (2004) found a moderate effect of TA upon the depression outcomes, with the other two studies not finding a significant association between TA and outcome. Theodore (2015) also reported dropout rates and found that early alliance scores (session 3) predicted drop out in the PE-I group, ( $p = 0.049$ ).

### *Child study findings*

Lower, but still significant, associations between TA and outcome were found in two out of the three child studies. Capaldi et al. (2016) and Ormhaug et al. (2014) found effect sizes of -0.29 and -0.35 respectively. Generally the child studies were of a higher methodological quality than the adult studies, so it could be that these effect sizes are more accurate.

Although Capaldi found that overall, WAI (client) scores at session 3 were moderately correlated to post-treatment PTSD symptom scores, the association was no longer significant when looking at each treatment condition separately (PE-A:  $r = -0.06$ ,  $p = .775$ ; CCT:  $r = -0.40$ ,  $p = .055$ ). Additionally, TA scores at mid-treatment and post-treatment were not associated with post-treatment PTSD severity. These results support previous studies showing that adolescent alliance significantly moderates PTSD symptom improvement regardless of treatment conditions (Keller et al., 2010; Weck et al., 2015). However, these results were surprising given that the CCT intervention had a specific focus on TA throughout treatment. This lends further support to the notion that the specific therapy components inherent within TF-therapies, such as breathing retraining and explaining treatment

rationales, can serve to increase buy-in to the treatment and may also have the effect of facilitating treatment alliance (Crawford et al., 2014). Ormhaugh et al. (2014) found the highest association between TA and PTSD outcome, finding a moderate effect size ( $r=-0.35$ ). This positive association was only found when TA was measured at mid-treatment. There was no significant association when TA was measured at the first session. Only a weak minimal overall association was found between TA and PTSD symptoms for the TAU group. As those in the TF-CBT did significantly better, it was hypothesised that the active ingredients of the TF-CBT group, helped to enhance TA and this subsequently aided better treatment outcomes (Ormhaugh et al., 2014).

Kirche et al. (2018) did not find clients' or caregivers' alliance to predict PTSD outcomes. However, when inputting the data using a path analysis, they found that caregivers' working alliance predicted the reduction of PTSD symptoms in children and adolescents (post-treatment PTSS:  $B = -0.553$ ;  $p = 0.001$ ; PTSS difference score:  $B=0.335$ ;  $p=0.031$ ). Clients' working alliance was not found to significantly predict outcomes despite there being a high correlation between clients and caregivers working alliance ( $B=0.446$ ,  $p<0.001$ ). These findings emphasise the importance of caregiver participation in TF-CBT for children and adolescents. Ormhaugh & Jenson (2018) suggest that this might be due to caregivers being able to motivate continued treatment participation and is thought to encourage caregivers to improve their parenting behaviour, as taught in TF-CBT (Samuelson et al., 2016).

#### *Other outcomes*

Ormhaugh et al. (2014) was the only child study to report the association between TA and other outcomes. They reported an association between TA and depression, anxiety and general mental health, finding moderate effect sizes for each ( $-0.32$ ,  $-0.35$  and  $-0.36$  respectively).

## **Discussion**

### ***Summary of findings***

The review found that, overall, TA was established early in therapy and was either maintained or improved during therapy. There were limited TA measures taken from any one perspective i.e. therapist, client or observer (see table 1), therefore it was not possible to make valid comparisons or assert which better predicted outcomes. Due to the heterogeneity in reporting of average alliance ratings it was also not possible to calculate a reliable average for the studies, although an estimate for both the child and adult studies was noted (see section below). Studies tended to use early alliance ratings due to the finding that TA predominantly stays consistent across the course of therapy. The review shows preliminary evidence that client-rated TA is associated with overall PTSD treatment outcomes in both the adult and child studies (Cloitre & Chemtob, 2004; Ormhaug et al., 2013).

### ***Average alliance ratings***

Although average WAI-SF ratings were ascertained, these should be interpreted cautiously due to the limited ability to make comparisons between studies. This was due to the heterogeneity in terms of different methods of scoring the WAI-SF measure, both with regards to perspective and version used. As a result, only two ratings from the adult studies and two from the child studies could be compared. Within the adult studies the mean score was 5.85 (WAI-SF, score range 1-7), the child studies mean was 71.3 (WAI-SF, score range 12-84). Only one previous review has provided average alliance ratings of the WAI (Shattock et al., 2018), finding an average client rating of 64.51. There are no previous reviews citing average child WAI-SF ratings. Although it appears that this sample had comparatively higher alliance ratings than those in Shattock et al.'s (2018) review investigating TA for individuals with schizophrenia and related psychoses; these findings should be interpreted cautiously due to the differences in adult and child populations and the limited number of studies included within this review.

### ***Alliance predicting outcomes of therapy***

Overall, TA appeared to be associated with improved PTSD outcomes, and where significant associations were found, these were relatively high when compared to previous research looking at the impact of TA in other client groups (e.g., Horvath et al., 2011; Martin et al., 2000; Shattock et al., 2018). These results suggest that TA should be carefully considered when working with people with PTSD and when using trauma-focused interventions. There was not enough evidence to suggest whether there is a relationship between TA and other therapeutic outcomes. More research is needed before conclusions can be drawn.

## ***Research and clinical implications***

This review offers further evidence that TA may be an important factor in improving outcomes when working with people with PTSD, also highlighting the importance of understanding and addressing ruptures within the therapeutic relationship (McLaughlin et al., 2014). Addressing ruptures may be particularly important when asking an individual to engage in the process of re-engaging with their traumatic experience, as is inherent in components of TF-therapy such as PE (Foa et al., 2013). Preliminary evidence also suggests that TA may help to reduce rates of depression and anxiety as well as improving drop-out rates (Ormhaug et al., 2014; Theodore et al., 2015).

TA may be particularly pertinent when working therapeutically with individuals who have experienced complex trauma (Cloitre et al., 2002; McLaughlin et al., 2014). This is due to the impact that inter-personal traumas may have on the ability to form trusting relationships with others (Cloitre et al., 2009; Duckworth & Follette, 2012). Future research should aim to interpret the results of those with simple and complex trauma separately. It is hoped that this process will be aided by the recent focus on/addition to the ICD-11 of the 'Complex PTSD' diagnosis (World Health Organization, 2018).

Evidence from both the adult and child studies suggest that it is the combination of specific therapeutic techniques, such as psychoeducation and emotion regulation strategies, alongside the client building up a relationship with their therapist that aids their engagement in TF-therapy and enhances treatment outcomes (Brady et al., 2015; Hoffart & Wampold, 2013., Ormaugh et al., 2014). This is particularly pertinent within TF-therapy where some elements are challenging and require an emotional commitment in order to succeed (Keller et al., 2010; Foa et al., 2013; Wampold & Budge, 2012). It appears, therefore, that alliance can be used as a catalyst for the participant to engage in the more challenging active therapy components of TF-treatments, and that engagement further enhances the TA (Cloitre, Koenan et al., 2002; Hoffart & Wampold, 2013; Keller et al., 2010).

The mixed findings within the child studies may be testament to the differing dynamic created through caregiver involvement within therapy (Kazdin & Whitley, 2006). Given that children

may experience additional obstacles, such as unclear expectations/understanding of therapy and often 'being told' that they are to engage in therapy (DiGiuseppe et al. 1996) creates a unique environment and power imbalance from which the child is to engage in therapy. This may be particularly challenging for those whose trauma experience was within their early relationships (Eltz et al., 1995; Cloitre, Cohen, & Scarvalone, 2002). As such, the conceptualisation of TA may be different for children than adults and must be considered further.

These results highlight the importance of reporting on the separate alliance dimensions to be able to more fully comprehend the mechanisms linking TA to outcomes (Horvath, 2018). A benefit of using the WAI-SF is its ability to identify the different components of the TA (Horvath, 1994). Given the changing way in which TA is being conceptualised and difficulties in comparing the different measures of TA, the WAI-SF has been recommended for use in studies investigating the impact of TA (Elvins & Green, 2008). TA measured from different perspectives (e.g. client, carer, therapist or observer) should also be routinely investigated in future research, with studies being large enough to detect effects.

In addition to further research investigating the impact of TA on outcomes, factors impacting the TA (e.g. therapist factors) also need to be investigated and reviewed. These findings will be crucial for use in therapist training and supervision, for the enhancement of therapies for those experiencing PTSD.

## ***Limitations***

Although there is evidence to suggest that TA predicts outcomes when working therapeutically with people with PTSD, the studies within this review were heterogeneous in nature, both in terms of design and analysis, so it was difficult to comprehensively amalgamate the results. It also meant that it was not possible to conduct a meta-analysis of effect sizes. Studies tended to have low participant numbers leading to reduced statistical power.

It may also be likely that client TA scores were inflated, given that the client alliance scores only captured those who were willing to engage in treatment (Keller et al., 2010). Therefore, the results may not be reflective of those with more severe interpersonal difficulties as a result of trauma. Additionally, Tryon, Blackwell, & Hammel (2008) conducted a review of psychological therapy studies finding that participants were more likely to score in the top 20–30% of the ratings, this included the TA measures such as the WAI, WAI-SF, and CALPAS. This could be due to a social desirability bias. Thus, it may be more difficult to capture an effect with regards TA predicting outcome, when TA consistently measures highly (Flannagan et al., 2018). Despite the possibility of clients using a restricted range of scores on alliance measures, significant relationships between alliance and outcome were detected in most of the studies. The observer-rated alliance measures may help to overcome these difficulties, but this would come at the cost of gaining the subjective experience of the client.

A limited number of studies were included in the review, particularly with regards child participants, highlighting the need for trauma research to more comprehensively investigate the impact of TA. This appears pertinent given the likelihood of TA significantly mediating outcomes in trauma-focused therapy. This review highlights the lack of research investigating the impact of TA from different perspectives (i.e. client versus staff); this is an important consideration given evidence showing that the perspective from which alliance is measured may relate differently to different variables of the TA (Shattock et al., 2018).

The included studies reflect the current status of the ‘complex PTSD’ diagnosis where only one adult study and one child study looked specifically at individuals who may merit this



diagnosis. All remaining studies appeared to have a mixture of those who might receive a diagnosis of simple or complex PTSD. As such, it was difficult to capture the varying impact that TA may make depending upon trauma experience. This will be an important consideration for future research as evidence suggests that the impact of alliance may vary depending upon the type of trauma experienced (Miller & Resick, 2007).

Limitations specifically related to this review include the inclusion of sub-threshold PTSD as well as chronic PTSD. Although it was felt to be important to include the child population who would clinically receive a psychological intervention for PTSD it could be that results may be different had all participants met the DSM IV criteria for a PTSD diagnosis. Additionally, decisions on which psychological therapies to include in the review were complicated by the lack of evidenced psychological therapies listed within the MATRIX and NICE, particularly with regards to complex trauma (Matrix, 2015).

The decision was made to exclude studies where participants had co-morbid SMI or substance use. However, it is likely that clinical populations with SMI or SU will have high levels of comorbid PTSD, therefore future research should also investigate these populations.

Finally, results may be biased due to the exclusion of non-English language studies.

## **Conclusions**

The results from this systematic review support previous meta-analytic findings in both youth (McLeod, 2001; Shirk & Karver, 2003) and adult populations (Horvath et al. 2011; Martin et al., 2000; Shattock et al., 2018) finding that TA is a modest but consistent predictor of outcomes across a variety of psychological therapies. Within TF-therapies there appears to be an important interaction between the specific factors inherent within TF-therapy and the TA. It appears to be a combination of the two that aids the most positive outcomes.

This is the first review to summarise findings of studies which investigate the relationship between TA and outcomes when working with both adults and children who have experienced trauma. Although offering an important insight into the relationship in this population between TA and outcome, much more research is needed for these preliminary results to be substantiated. More longitudinal studies with larger sample sizes are required for effects of TA to be found, as is the consistent use of pan-theoretical measures of alliance, such as the WAI-SF.

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## **Journal Article 2: Empirical Study<sup>1</sup>**

**A grounded theory study: How do staff understand Psychosis?**

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## **A grounded theory study: How do staff understand Psychosis?**

### **Abstract**

A comprehensive understanding of a person's difficulties is considered a bedrock of evidence-based practice and fundamental for effectively devising a treatment plan. However, psychosis is characterised by significant levels of interpersonal difficulties. These may influence the quality of the therapeutic alliance and clinicians' capacity to make sense of the individuals experiences. This research, therefore, aimed to establish a grounded theory of how staff make sense of individuals experiencing psychosis. A social constructivist version of grounded theory was used involving fourteen interviews with staff from both child and adult mental health services offering support to individuals with psychosis. Interviews were recorded and transcribed. The overarching theme that emerged was one of staff 'not knowing' due to barriers within the therapeutic relationship. One key-category and four sub-categories are discussed demonstrating how barriers within the therapeutic alliance can ensue and result in staff finding it difficult to make sense of the experiences of the person with psychosis. The research reports on the psychological processes of mentalization and threats to client identity and offers an interactional grounded theory as to why and how the 'not knowing' is maintained. Findings are contextualised within existing research and implications for clinical practice and future research are outlined.

**Key words:** Psychosis, Schizophrenia, Grounded theory, Mentalization, Identity

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## Introduction

Psychosis is a complex phenomenon and one which can profoundly impact the lives of those experiencing it as well as the systems surrounding them (Briggs et al., 2008; Awad & Voruganti, 2008). Sometimes the experiences of psychosis may feel easily understood whereas at other times it can feel a frightening, unknown quantity for all involved.

Please note that the term 'client' will be utilised throughout this study to denote a person experiencing psychosis.

At the heart of mental health services, whether it be from a medical, nursing, psychological or other disciplinary perspective, is the need for a comprehensive assessment and care-plan from which to devise an effective treatment plan.

Where once psychosis or 'Schizophrenia' was considered purely a 'disease of the brain', it is now understood that there is a complex interplay of biological, psychological and social factors (Van Oz & Reininghaus, 20015). It was thought that we should not speak about the experiences associated with psychosis, such as voice hearing, for fear of making that particular symptom worse, now it is more commonly thought that we must seek to understand these experiences through open discussion with the person experiencing them (BPS, 2017). Indeed, it has been postulated that the way in which a person with psychosis makes sense of their difficulties might indicate the degree to which the person experiences it as distressing (Kuyken, Padesky, & Dudley, 2008).

Whilst the reductionistic 'bio-medical model' has had some success in advancing diagnosis and treatment of a range of diseases, there is a noted lack of explanation for 'illnesses' with no clear biological underpinning (Wade & Halligan, 2017). Jaspers (1963) notably asserted that there is a clear division between explanation and understanding and that several symptoms of 'Psychosis' were indeed non-understandable. He believed that we can only understand experiences that we have empathy for, and that it is the form and not the content of delusions that are important diagnostically (Kiran & Chaudhury., 2009). However, others have contended this idea believing that through enhancing understanding we can increase empathy, and in turn aid our understanding (Kendler & Campbell, 2014). The biopsychosocial model looked to expand our understanding of illness, allowing for more complex phenomenon to be understood (Engel, 1977). Research shows that where an explanatory

model does not match with the clients understanding poorer health outcomes can result (Haidet et al., 2008).

Therefore, collaboration between clinician and client to develop a shared understanding of their psychosis, also known as a formulation, could have great bearing on the outcome and is recommended as best practice (BPS, 2017; National Service Framework, 1999; NICE, 2014; WHO, 2012).

Effective evidence-based interventions are guided by an accurate understanding of an individual, the implementation of which leads to reduced levels of distress and increased wellbeing (Kinderman, 2005; Kuyken et al., 2008; Tarrier, 2006). Creating a shared formulation has been found to enhance clients understanding of their difficulties (Butler, 1998; Dudley, Siitarinen, James & Dodgson, 2009; Ryle, 1990), increase motivation, create a sense of hopefulness and improve the therapeutic relationship (Needleman, 1999; Pain, Chadwick, & Abba, 2008). Chadwick (1997) asserts that for formulations to successfully aid interventions they must understand the underlying source of distress for the individual not just the potential sources of psychosis. Therefore, more than just a 'theoretical' understanding must be sought.

Despite there being some uncertainty around the validity and reliability of formulations (Kuyken et al., 2005) and further research into their effectiveness being required (Hartley et al., 2016), the BPS (2017) postulate that an accurate case formulation could be clinically and interpersonally more useful than clinical diagnosis, particularly for those with complex mental health difficulties such as psychosis. The Department of Clinical Psychology (DCP, 2011) advocates the sharing of formulations within teams working with individuals with psychosis as evidence shows that this can enhance a sense of team cohesion, increase understanding, improve therapeutic relationships (Summers, 2006) and reduce negative feeling, such as blame, towards clients from staff (Berry, Barrowclough, & Wearden 2009).

However, the assessment/care-planning process assumes that all parties are willing and able to engage in the process. It is well documented that mental health services can have difficulty engaging clients, with 25% of individuals being evidenced to disengage from treatment programmes (Nose, Barbui & Tansella, 2003; Startup et al., 2006). A more recent systematic review found disengagement rates of between 20.5 – 40% for people experiencing first-

episode psychosis despite ongoing therapeutic need (Doyle, Turner, Fanning et al., 2014). Identifying mechanisms leading to disengagement is key to ensure the individual has access to effective care. Clients might also be labelled as 'non-compliant' by health-care professionals, leading to a further breakdown in the therapeutic alliance, client frustration and disengagement from services (Hamman et al., 2011; Hutton & Morrison, 2013). Evidence also shows that individuals with psychosis can be excluded from important treatment decisions (Byrne & Morrison, 2014; Hamann et al., 2008) and often anti-psychotic medications are the only active treatment offered (Burns et al., 2011; Warner et al., 2006), thus assuming the individuals' primary goal is to reduce positive symptomology which is not always the case (Byrne et al., 2010). Therefore, the way in which staff and services interact with these individuals is key to their engagement and ability to develop a shared understanding of their difficulties.

Mentalization is one model that explains why it may be difficult to gain an accurate understanding. Psychosis is characterised by significant levels of interpersonal difficulties (Penn et al., 2004) often borne out of attachment difficulties (Berry, Barrowclough & Wearden, 2008). This affects how clients seek help, particularly at times of heightened psychological stress resulting from their psychotic experiences. If relationships with care have been experienced as traumatic, attachment difficulties can form, making individuals increasingly wary of forming relationships with others (Berry, Wearden & Barrowclough, 2007). This is also thought to impact the clients ability to mentalize (Brent, 2015; Fonagy, Gergely, Jurist & Target, 2002). Mentalizing is an individual's reflective capacity to recognise mental states, and how they motivate interaction, e.g. thoughts, beliefs, feelings and intents in oneself and others (Allen & Fonagy, 2006). Barriers to the therapeutic alliance can result from the client misunderstanding staff intentions/behaviours (Conte et al., 1990; Nyklicek, Poot & Van Opstal, 2010).

High affect and interpersonal stress are also reported by staff members working with acutely mentally unwell individuals (Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2012; Rossler, 2012). This is particularly prevalent in staff working with individuals with psychosis (Savicki & Cooley, 1987). Therefore 'high risk' situations and difficulties within the relationship can heighten staff and client anxiety and decrease mentalization, leading to decisions that lack reflexivity and may further damage the therapeutic alliance (Ewers, Bradshaw,



McGovern, and Ewers, 2002; Gumley & Schwannauer, 2006). Where difficulties in the relationship have formed, it follows that conceptualising someone's experiences will be more difficult. Likewise, poor formulations will potentially have an impact on the therapeutic alliance and on how client and staff view each other (Berry et al., 2009; Summers, 2006).

Individuals with Psychosis are also more likely to have experienced high Expressed Emotion (EE) within their familial relationships. High EE refers to affective attitudes and behaviours towards patients characterized by critical comments, hostility, and emotional over-involvement (Leff & Vaughan, 1985) and is seen as a risk factor for psychosis. With increased staff and client anxiety leading to decreased mentalization it is increasingly likely that individuals will resort to a high EE communication style (Berry et al., 2011). Individuals with Psychosis may be particularly alert to this and can disengage from the staff member as a result (Berry et al., 2012).

Stigma surrounding the 'Psychosis' diagnosis has also been postulated as a mechanism by which clients may disengage from mental-health services (Corrigan, 2004). Negative views held within society can be internalised by individuals resulting in reduced self-esteem and increased shame (Staring et al., 2009). The Social Identity Approach (Tajfel & Turner, 1979) supports this view, finding that those who feel part of a negatively perceived group will be more likely to experience low mood, reduced self-confidence, and increased helplessness (Haslam et al. 2009). Given that social risk factors, such as, exposure to poverty, social inequality and childhood trauma have been found to be prevalent in individuals with Psychosis (Bentall et al. 2014), it is likely that they already have experience of feeling marginalised. Therefore, clients may be increasingly likely to disengage from services and staff that they perceive to be linked to this negatively perceived Psychosis identity (Dilks, Tasker & Wren., 2010).

Given the evidenced level of difficulty in engaging individuals and the continued lack of treatment choice, it is not clear how able staff are in understanding the difficulties experienced by those with psychosis; do they go beyond a purely theoretical understanding of their difficulties?

Additionally, given the evidenced importance of being able to understand and formulate a person's difficulties, there has been a paucity of research within this area (Beiling and

Kuyken, 2003; Flinn, Braham & Dasnair, 2014), particularly with regards the underlying mechanisms and how staff understand at a deeper level the difficulties experienced by those with psychosis (Chadwick, 2007). Although studies have found that therapists tend to agree on overt factors, such as physical and behavioural difficulties, there is less agreement in terms of the inferential and unobserved aspects such as underlying core beliefs and motives (Dudley et al., 2009; Persons, Mooney and Padesky, 1995; Persons & Bertagnolli, 1999; Mumma & Smith, 2001; Kuyken, Fothergill, Musa & Chadwick, 2005).

Therefore, despite the call for staff to develop a comprehensive and shared understanding of the experiences of the person with psychosis, evidence would suggest that this may not always be achieved. Interpersonal difficulties, symptoms of psychosis and heightened psychological stress for both the staff and clients may cause significant barriers within the therapeutic relationship impacting the way in which staff might conceptualise psychosis.

For that reason, this research aimed to explore how staff working within an NHS Scotland health board were able to understand the difficulties and distress experienced by people with psychosis in their care.

## **Method**

### ***Design***

A qualitative methodology was utilised to allow for an inductive approach which focused on discovering how participants conceptualise the difficulties experienced by individuals with Psychosis (Corbin & Strauss, 2015; Smith et al., 2015). Grounded Theory (GT: Glaser & Strauss, 1967) was the primary qualitative methodology employed within the study.

### ***Grounded theory***

A grounded theory framework was utilised to analyse the data, due to its ability to generate a theory, offering an explanation as well as exploration into staff conceptualisations of Psychosis (Birks & Mills, 2011). Grounded theory can exist in various forms according to the differing philosophical, epistemological and ontological positions of the researcher/s (Breckenridge, Jones, Elliott & Nicol, 2012; Howard-Payne, 2016). Glaser and Strauss (1967) originally took the view that unbiased researchers can assume an objective reality. Most researchers now, however, take the position that meaning from data is constructed rather than discovered (Charmez, 2014; Corbin & Strauss, 2015). The lead author took a social constructionist approach (Charmaz, 2014), due to the value they placed on the importance of reflexivity and shared understandings between staff and clients and the awareness of how conceptualisations of an individual's difficulty can change when they enter a 'service'. A social constructionist version also considers the active role that the researcher will take in the co-construction of the narrative (Willig, 2008). A statement of reflexivity is included to recognise the potential influence of research process and author characteristics on findings (See Appendix 4) (Mays & Pope, 2000; O'Brien, Harris, Beckman, Reed & Cook, 2014).

### ***Participants***

The study was publicised to NHS clinicians working within a Scottish health board, who had experience of working with individuals with psychosis. Participant information was sent sequentially as clinicians expressed an interest in participating. In total, fourteen participants were interviewed; seven participants were from Adult Mental Health (AMH) and seven

participants were from Child and Adolescent Mental Health Services (CAMHS). Please see table 1 for the overall demographic information of the participants.

**Table 1.** Demographic information for participant sample

Demographic information	Number of participants (n=14)
Sex	4 males 10 females
Years of experience	3 months – 24 years (mean = 12 years, 7 months)
Job role	5 x Staff nurse 2 x Psychiatrist 1 x Senior Staff nurse 1 x Doctor 1x Occupational Therapist 1x Assistant Occupational Therapist 1x Social worker 1x Consultant Clinical Psychologist 1x Nurse therapist

## ***Procedure***

In accordance with the research aims, upon completion of informed consent, demographic data was gathered and a semi-structured interview was conducted. Upon completion of each interview, memos were noted, including any observations of participants and the interview process (Charmaz, 2014; Sbaraini et al., 2011).

## ***Data collection***

Each participant took part in a face to face qualitative interview. In line with the GT approach, interview prompts rather than a scripted interview were developed to encourage the interviewer to follow the participants' lead, engaging them in a flexible and evolving discussion (Charmaz, 2014), but without blocking free-flow of new ideas (Silverman, 2000). The other advantage of this approach is that it keeps the interviews discursive in nature whilst also allowing previously identified themes that have emerged from prior interviews to be followed-up and clarified (Bryman, 2004). The same question was used to begin each interview 'please tell me about someone you have worked with, who has psychosis, who for whatever reason you found was challenging to work with'; the question was designed to open up the discussion.

After each set of three interviews, feedback was sought from the research supervisors around the content and style of questioning being used, this was to ensure the interviewer remained flexible whilst still covering important lines of enquiry.

Data collection and analysis ran concurrently so that new themes could be followed up in future interviews. Where this was the case, questions designed to verify an emerging theory were kept to the later parts of the interview. This was so that any new data/themes were not missed. This process ensured that the principles of theoretical sufficiency were followed through, ensuring the researcher remained open to emerging data (Charmez, 2008; Dey, 1999). This sampling process was conducted until there were no new themes emerging from the data and the emergent themes were strong and robust enough that iterative hypotheses could be drawn. Interview duration ranged from 45 – 83 minutes (mean = 60.4, SD = 8.4).

## ***Ethics***

The study received a favourable opinion from the West of Scotland Research Ethics Committee 05 (Lothian NHS Board; see Appendix 5), the University of Edinburgh School of Health and Social Science Ethics Committee, and research management approvals from NHS Lothian Research and Development departments. This study adhered to a data management plan, including principles of data protection and confidentiality. All identifying data was removed or anonymised upon transcription. Written and informed consent was sought from all participants and they were aware of their right to withdraw from the study without any adverse effects (See Appendix 6).

## ***Data Analysis***

Audio-recordings of the interviews were transcribed verbatim by the lead author between June 2018 and February 2019. All transcripts were read a minimum of twice. Within social-constructivist grounded theory a systematic process of data collection is followed so that an emergent theory can be developed (Charmaz, 2014). Data analysis was supported using N-VIVO software, resulting in an audit-trail (N-VIVO Version 11, 2018). Line-by-line coding was completed as part of the initial analysis; this had a focus on the contextual analysis of actions and events (Charmaz, 2014), see Appendix 7 for coding examples. Secondary analysis involved focussed coding, using the constant comparative method of comparing data and codes within and between transcripts. Additionally, theoretical sampling was used in the form of new interview questions based upon potentially relevant criteria, this aided exploration of gaps and disparities within the data and tested preliminary interpretations (Charmaz, 2014).

This process aided theoretical saturation, whereby no new theoretical themes were found (Charmaz, 2014). Throughout the analysis, memo-writing was essential for the development of theoretical categories, increasing the level of data extraction. Data and code interpretation, assumptions and areas of further enquiry were documented (Charmaz, 2014; Fassinger, 2005), see Appendix 8 for memo examples.

Following completion of the analysis a literature review was conducted to compare research evidence with the current findings of the GT study. It was then possible to further interpret the theory through considering how the current evidence base supported or disputed current theoretical categories.

## Results

The primary aim of the research was to generate a theory about how staff make sense of psychosis. Findings indicate that staff often cannot understand fully the difficulties that the client is experiencing. There was a fundamental sense of 'not knowing' (the core category of the grounded theory). 'Not knowing' was linked to the key category of 'Identity' which had four sub-categories related to it, each one relating to specific aspects of psychosis and how this affects staffs' ability to understand the experiences of the client. The four sub-categories, 'Trauma and re-traumatisation', 'Social factors', 'Cognitive functioning' and 'Psychosis itself' link to the clinician's perception of the client becoming 'guarded', thus 'not knowing' is facilitated through difficulties within the therapeutic alliance.

There was also a theme of 'action or inaction', whereby the choices that the staff/service make can have ramifications for the treatment trajectory of the client. Where decisions are made without much thought, they can appear detrimental, seemingly contributing to the 'not knowing'. This can be evidenced both in terms of action (e.g. use of the mental health act; MHA) and inaction (not actively offering someone an evidence-based treatment).

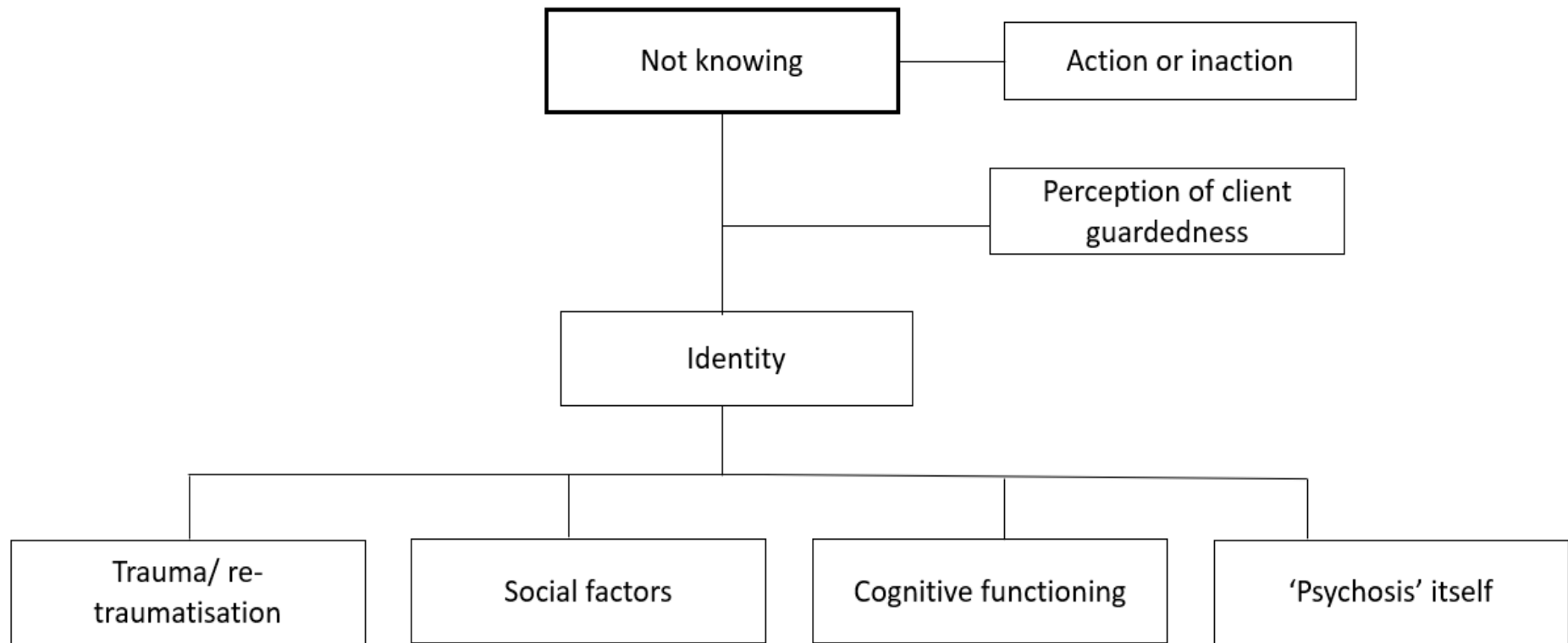
Please see figure 1 for an overview of the organisation of the categories and themes.

The model and categories highlight the interactional process between staff and client. It is through these interactions that the 'not knowing' is maintained. Finally, the model is cyclical in that how the staff and client interact is key to how the 'not knowing' is maintained and reinforced.

Through in-depth analysis of the narratives, the proposed model details why this difficulty in 'knowing' may occur specifically when working with individuals with psychosis. Categories are largely inter-related and overlapping, indicating the complexity of psychosis itself, especially within the context of staff and client interactions. As a caveat, it should be noted that the proposed model has emerged through the researcher's interpretation of participants' accounts of experiences of working with people with psychosis and is, therefore, tentative, requiring further research to validate the proposed processes.



**Figure 1.** Organisation of the categories and themes



## Not knowing

Throughout all interviews, staff expressed how difficult they can find it to understand what is happening for the client, particularly in terms of their internal world, and can be left with the feeling of 'not knowing'.

*"...it's hard to know where you're up to with him, he's a bit of an enigma and that's the difficulty sometimes when working with people with psychosis. You're relying on, other than observing, pretty much what the patient can tell you." (P01)*

Every participant also spoke of the individual being 'guarded' and how this impacted upon engagement. They reflected upon how this could lead them to feel unsure of how to make sense of the person's difficulties. Staff spoke about the impact this had on them knowing what to do for the best, leading to increased anxiety.

*"...his presentation created a lot of anxiety amongst professionals. He was not forthcoming with any information, any history, any background. So, it was difficult to, for all the professionals who were working with him, including myself, to know is he hiding, is he guarding, is he not letting us know things?" (P06)*

*"...the risks can change very quickly for somebody who is not telling you what's going on, he's changing his story even when he does tell you what's going on and who has clearly refused any further follow up." (P01)*

So, although staff demonstrated an ability to surmise and hypothesise based on their previous knowledge of psychosis, for those individuals who were described as more unwell, especially those lacking 'insight' or a sense of their own difficulties, staff expressed a sense of not knowing, and therefore 'not really knowing what to do for the best'.

The following key and four sub-categories are hypothesised to offer an explanation as to why 'not knowing' is such a feature for staff working with individuals with psychosis. The first three categories relate directly to staff and clients, the final two categories relate to clients and for all, the interactional element is key.

## Identity

All sub-categories were found to feed into the identity key-category in that they all were discussed as having an impact on staff perceptions of the individual's sense of self.

### **Client**

Ten participants spoke about how early life experiences of the client coupled with their experience of psychosis may have led them to having a fragile sense of self. Loss of identity was discussed by staff as an initial risk factor for the individual developing a mental health difficulty, already rendering them vulnerable to feelings of shame and not knowing where they fit in.

*"I think finding her role and her identity was really difficult. She was very clever but she never felt like she fitted in anywhere, she didn't feel like she fitted in in school, in her peer group, so all those things were troublesome for her. It was a bit of a perfect storm really for her" (P07)*

Staff also discussed how 'identity' can be further diluted as the individual continues their journey with psychosis and within mental health systems. This was particularly the case for those described as acutely unwell who, as a result, spent prolonged periods in hospital, essentially excluding them from gaining and exploring their identity within the 'real world'. This was reflected upon in the context of the client comparing themselves to others, to peers, staff or other inpatients, and not perceiving themselves as good enough.

*"So he has this awareness that he belongs to a family where people have accomplished, they are professionals, his peers have moved on and he is trying to find his own identity. He tried to create a new identity where he was doing something special, you know like something that no one else has done before. But then when you go deep down, he's actually not the person that he's trying to be. He is more disturbed, struggling, whether he can express that and talk about it, I guess that is the difficulty that he is facing." (P06).*

The narratives demonstrated that through the clients' struggles with identity they became increasingly guarded, which then contributed to the staff 'not knowing' the person. There was a sense from the interviews that staff felt the client was trying to protect their ego, resulting

in behaviours that were perceived as increasingly challenging for the staff and so impacting the therapeutic alliance.

*“Because he was quite, he could be quite demeaning you know to you - like his self-esteem was very low and you could understand, you could see that that was why he was trying to make your self-esteem very low.” (P09)*

Eight participants spoke about ‘control’, whereby a struggle for power and control could ensue as a result of the client becoming ‘guarded’ due to perceived threats to identity caused by their interaction with the mental health system. The most commonly cited reason for a client being guarded was fear of consequences, particularly hospital admission. This was speculated to be partly due to hospital being perceived as a ‘bad place’ but also recognition by the client that if they are in a psychiatric hospital they must be ‘mentally unwell’. Staff perceived this interaction to impact upon the client’s sense of self and their reactions to future care, leading to them becoming increasingly guarded. Staff reflected upon how this increased sense of ‘not knowing’ exacerbated their anxiety, resulting in staff having to take more defensive actions such as increased use of CTOs or the MHA and so the pattern of control and loss of identity for the client is reinforced and the ‘not knowing’ continues due to barriers within the therapeutic relationship.

*“...so you know I think she just didn't want to be different, and so having a mental health condition of such significance was making her different, and what she knew was when she became unwell, people asked her to do things that she didn't want to do. She wanted to be her own person, she just didn't want to take on that she had an illness. She would at any cost avoid even going there, and even when you try to have a conversation with her about it she just wouldn't, she wouldn't engage with that...” (P07)*

### **Staff**

Six participants discussed their changing services and how this impacted their own professional and service identity. This included less opportunity for assertive outreach and reduced psychiatry input. Participants acknowledged that reduced access to psychiatry impacted their ability to feel able to safely hold risk and that this too led to increased anxiety. Staff acknowledged that the service limitations could lead them to holding back from clients,

acknowledging that this could further reinforce 'dysfunctional' patterns that the person has experienced in the past. The incongruence between what staff can offer compared to what they want to offer appeared to be causing increasing anxiety and confusion. Below is a reflection on how the increased anxiety and confusion was seen as 'infiltrating the team'.

*"We don't function very well as a team we are quite dysfunctional. And actually, sometimes I think that madness gets into the team.... we are incredibly fragmented, so people are in and out part-time, it is very rare that we all get together. So again, mirroring fragmentation that we have in our client group gets into our system so it can be quite difficult." (P14)*

### **Staff and client interaction**

The interaction between clients' and staff identity was seen to reinforce and maintain patterns of increased anxiety leading to increasingly guarded interactions. Staff acknowledged the importance of being able to offer consistency and safety to the client in building a therapeutic alliance. Ultimately staff spoke of a feeling of failing the people they were trying to work with and how this could serve to re-traumatise/ maintain their difficulties and increase the sense of not knowing due to barriers within the therapeutic alliance.

*"So for me I constantly find myself in this little dance of how much do I do? How do I allow the work to develop when I know that I'm going to have to start transitioning them in six months? Reel you in and then chuck you out - which is a lot of what their experiences are." (P14)*

The term '**insight**' was repeatedly discussed within all interviews as a fundamental barrier in getting to know the client. Staff reflected upon how the less the client could make sense of their own difficulties or saw them as related to a 'psychoses' the less they would want to engage with mental health services. This meant staff found it difficult themselves to make sense of these individuals' difficulties due to the client being guarded.

*"But that is really, really common with these types of patients, they are insightful. You could say to them this is how it is and give them the information, and they will just say you're wasting your time and not want to talk to you" (P11)*

Participants reported feeling anxious about the unpredictability of their client not engaging with the service, leading to a concern about their efforts not being in line with client wishes. This in turn was thought to reinforce a vicious cycle of anxiety within the therapeutic alliance, making it difficult for staff and client to 'get to know' each other leading to poorer outcomes.

*"...and he is so evasive of it. He will not be in, he'll not turn up for appointments. He's very anti-authoritarian, he's a very macho kind of guy, and he says himself I don't want to be controlled by another man, i.e me. I go down the route of, 'it's not like that, we're just trying to keep you well', but he doesn't believe that he is unwell at all. It's very difficult for us to get him medicated regularly, and to be sure that because of that he's not going to cause harm." (P01)*

Eight participants spoke about 'lack of insight' being a mechanism by which clients protected themselves; a factor which seems strongly correlated with 'identity' in relation to the trauma of having psychosis. The following extract illustrates the point from one participant.

*"Because I think it was so painful, it's so painful. Because it turned the family upside down. He ended up in a psychiatric hospital; for Mum that was a huge loss for her because she had big expectations for him and that was painful for (young person's name) to witness." (P14)*

## Trauma and re-traumatisation

### *Client*

All participants reflected upon the trauma experiences of those with psychosis in relation to the developing psychosis. This category notes the impact of this on the ability of the client to seek help or form therapeutic relationships/attachments with staff and services.

*"I think he was suspicious and paranoid, we never got the feeling that he totally trusted us...and the other side of it, was also the trauma. I think he was suspicious about, he had experiences of people who were supposed to be caring for him in roles that he should respect, like his own parents, absolutely betraying him. So why would he want to trust us." (P08)*

Staff also spoke about individuals' experiences of intra-familial conflict, particularly experiences of high or low expressed emotions from key family members. Staff frequently expressed the view that this can impact the individual's ability to understand and share their own emotions. It seemed that the individual's attachment style and experiences of how emotions are communicated within their families/care systems have an impact on how open they are with staff, increasing the 'not knowing'.

*"And I don't know whether in the past, they had a relationship where they communicated on an emotional level? Which we think they didn't. So it must be too hard for him to go through each and every feeling. So we're not able to get to the bottom of anything. It's a very superficial engagement" (P06)*

It was also felt that the experience of having psychosis itself was traumatic, as was in-patient admission.

*"I think, she just had a lot of really scary images, abusive people from her past who she felt were coming to get her, she would have images of people coming through the walls at her. It was all quite horror movie kind of stuff!" (P04)*

*"...so I think that the psychotic experience was horrible but also I think she found being in hospital really traumatic." (P07)*

## **Staff**

Evidence from interviews demonstrated how ongoing difficulties within the therapeutic relationship resulted in traumatic experiences for staff. Incidents, for example, involving aggression or the client just not wanting to engage with staff, increased anxiety and affected their approach/confidence going forwards. This caused barriers within the therapeutic alliance, impacting the ability of staff to make sense of the clients' difficulties.

*"I think the first time that she really was quite rejecting of me when she wasn't well – you know, swearing at you, vehement that you are the devil incarnate! Even though you are on a professional level, personally you do have to take that step back, and I kind of felt like 'oh'! I had to spend that time taking trying to think it's not personal" (P07)*

## **Staff and client interaction**

The interviews revealed evidence of how re-traumatising episodes of past care impacted current therapeutic interactions between the caregiver and care-recipient.

Below is an example of a participant reflecting upon the difficulty of engaging with someone who had had a previous negative experience of care from a service.

*"...engaging with her was hard; I think it was to do with the general mistrust of the services, and I think because she felt she had had a really bad experience of the services, I think that's where a lot of the paranoia was coming from." (P04)*

Participants also speculated that clinicians can have less sympathy for those they perceive to be more in control of their actions, for example, those with 'drug-induced psychosis'; leading to high expressed emotion and impacting the care they received.

*"...so when I first met this patient one member of staff said 'I don't know why he is here', he admitted himself it is just because he's taking illegal highs..." (P12)*

These interactions seemed to lead to 'actions' or 'inactions' that weren't in the person's best interest. These terms are used to describe actions taken which lacked thought/understanding



and were often preceded by increased staff anxiety. There were examples of 'action' or 'inaction' throughout the interviews.

*"Somebody came up with the bright idea of getting her on birth control - 'well she is going out on passes so how can she be trusted?'. So what happened there was... that was a decision based on other people's anxieties. She was really upset by it!" (P07)*

Interestingly, 'inaction' was more commonly talked about:

*"I guess that staff stop trying. And we do have to reframe our thinking because otherwise there is a risk that you end up rejecting them too". (P14)*

## **Social factors and lack of a stable base**

### ***Client***

Throughout the interviews there was recognition amongst staff that clients often have social difficulties. Five participants spoke about how clients can be distressed and anxious as a result of not having a stable base, e.g., home, job or money. Evidence from interviews demonstrated that engagement with these individuals could be more difficult due to the differing priorities of the staff member and client. For example, the clinician might be concerned about them picking up their medication prescription whereas the client is thinking about where they are going to stay that night.

*“I think his lack of housing contributed to him having a more chaotic life. So, it was harder for him to engage with us because he never knew where he was at, he had bigger things to concentrate on.” (P05)*

### ***Staff***

Restrictions in service provision, limiting sessions for people of no fixed abode, impacted the therapeutic relationships of this sub-group. Staff perceived this as reinforcing previous patterns of rejection for these individuals.

*“Consultants were arguing about it because he had no fixed abode, and because they were busy, and they were like ‘you know he’s not got a GP’, and you know, ‘he’s not ours’. I couldn’t understand, the most vulnerable section of society and he was just falling through.” (P8)*

Evidence showed that staff also lacked a ‘secure or stable base’. Service changes increased staff anxiety due to an awareness that they have fewer resources to help, leading to actions being taken that may not be in the best interest of the client.

### ***Staff and client interaction***

Interviews demonstrated that with increased anxiety for both client and staff, as a result of social factors, a further sense of ‘not knowing’ was created as neither member were willing or able to engage fully with each other.

## **Cognitive functioning**

Ten participants discussed factors that they saw as changing the brain and therefore making it harder to engage with the client. Staff reflected upon how these factors can make it difficult for the individual to engage with services and staff, for example, forgetting appointments, forgetting to take medication and becoming more unwell, or not being able to explain how they are feeling. Factors included, symptoms of psychosis, drug use, head injury, and neurocognitive co-morbidity, predominantly Autism Spectrum Disorder (ASD).

Below is a staff reflection on how cognitive functioning can make it difficult for them to understand the individual's difficulties due to inconsistent feedback being given.

*"Well I think, cognitively he's quite knocked off, his cognitive function is probably such that he doesn't remember what he has told you. And he will change his opinions on other things, other than just taking medication or engaging in treatment which makes it hard to know what's best to do." (P01)*

Within this category, staff also reflected upon the impact of psychosis and the use of psychotropic medication. For example, inpatient admissions were discussed as causing the individual to miss out on school/ social life which could impact upon the developing brain. This was also seen as affecting the individual's sense of identity prompting them to become guarded in a bid to protect their sense of self.

*"He had lots of hospital admissions; one admission was particularly serious. I would say as his brain was developing there was a lot of insults in between to change the pathway that his brain would have taken. He was hard to engage with and I think he knew that he wasn't what people had expected him to be." (P06)*

## **Staff and client Interaction**

Staff thought diminished cognitive functioning resulted in clients having reduced ability to communicate information to staff. The result was increased anxiety for staff because of 'not

knowing' and thus further barriers to the therapeutic alliance and decreased understanding could ensue.

*"I think, they are the group that I worry about most because of the unpredictability, because of the not knowing. Those young people who are constantly overdosing and self-harming, although don't get me wrong it's not that they are not risky they actually are, but you get to see patterns and you can work with patterns whereas with this population you don't know what's going on in their minds because they can't always tell you." (P11)*

## **Psychosis itself**

Throughout all interviews staff reflected upon the specific symptoms of psychosis that fundamentally appear to cause the client to be guarded. Paranoia and delusional beliefs were often cited as factors causing individuals to become suspicious of staff and therefore feeling more difficult to interact with.

*“...and she started to get a big re-emergence of her symptoms and went very paranoid and very suspicious again.” (P02)*

These symptoms of psychosis and the anxiety/fear caused to the client were thought to lead to risk being more unpredictable. All staff spoke about their own anxiety, feeling unsure about the risk that the client might pose to themselves and others.

*“He self-harmed when he was very distressed, he was quite paranoid and found it difficult to not respond to ideas that people were talking about him or that people were trying to hurt him. So it was very - 'oh my god what are we going to do with him'?!” (P14)*

## **Staff and client interaction**

Within the interviews there was a sense of increasing anxiety for both staff and clients as psychotic symptoms increased. Rising anxiety was also discussed as increasing symptoms of psychosis, thus increasing risk. Evidence highlighted that actions taken by staff to minimise the feeling of risk and anxiety, such as hospital admission, could paradoxically cause distress and thus reinforce feelings of paranoia, suspicion and fear. This made it increasingly hard for staff to get to know and understand the people they were working with.

*“But also, I think she just felt frightened of other patients, and just frightened of the experience. She felt that staff were against her. She was very paranoid, and very consumed in her thoughts, and so I thought that staff probably were trying to communicate and support her, but you know, she was difficult to reach when she was in that sort of place” (P02)*

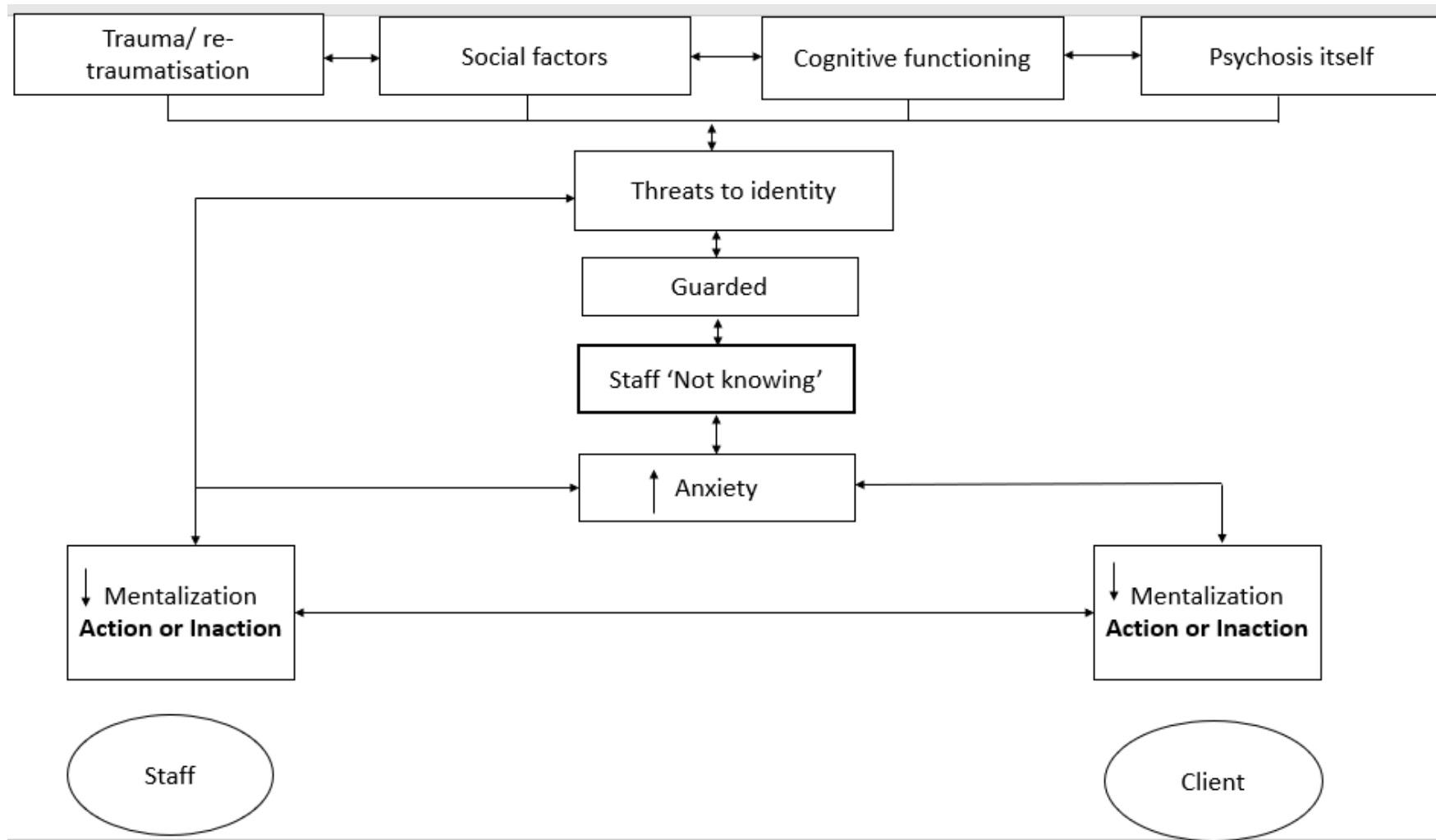
## Discussion

### *Summary of findings*

Overall the findings from this study suggest that although staff can formulate a generalised hypothesis based upon their knowledge of what causes and maintains psychosis, they are often not able to fully understand what is happening for the client. This is particularly the case where the client is deemed as lacking 'insight', who is acutely unwell and is perceived as 'guarded'. The study found one key, and four sub-categories which offer an explanation as to why the difficulty in 'knowing' occurs. The key finding from this study is the delineation of the interactional element between services, staff and clients in understanding how the 'not knowing' is maintained and reinforced.

Space does not permit a full examination of the key and sub-categories. Instead, the discussion will focus on the core psychological processes maintaining staff 'not knowing' (see figure 2 for the grounded theory).

**Figure 2.** A grounded theory of why staff find it difficult to make sense of the difficulties experienced by individuals with psychosis.



### ***Hypothesised mechanism by which ‘not knowing’ is maintained and reinforced***

Throughout the categories there is evidence that the mechanism by which the ‘not knowing’ is facilitated is that of increased anxiety/arousal levels. This can perhaps be understood in the context of previous literature regarding ‘mentalization’. Mentalization offers an integrative framework that can be applied both theoretically and practically to enhance provision of care (Bevington et al., 2013). The ability and curiosity of staff to see relationships between thoughts, feelings and actions in both themselves and others is thought to impact their ability to accurately formulate someone’s difficulties (Faber et al., 2005; Hartley et al., 2010; Shill & Lumley, 2002) and to build a positive therapeutic relationship (Berry, Barrowclough, & Wearden, 2008; Berry, Shah, et al., 2008). Effective mentalization, therefore, can improve therapeutic alliances as clinicians are more aware of their own understanding and will consider more deeply the intentions and motivators behind the behaviours of the individuals they are working with. Evidence from the interviews found that staff were often aware of ‘not knowing’; this demonstrates mentalizing ability as staff were mindful that they cannot ‘read the minds’ of their clients. This makes it more likely that they will reflect upon the actions and behaviours of the client before acting themselves. Thus, awareness of ‘not knowing’ can be beneficial for both staff and client.

However, mentalizing is a continuously changing process and can be easily reduced with the presence of emotional arousal (Fonagy & Luyten, 2009). High affect and interpersonal stress were frequently expressed by staff within this study, something that has been found to be particularly prevalent for staff working with individuals with psychosis (Morse et al., 2012; Savicki & Cooley, 1987). Therefore ‘high risk’ situations can heighten staff anxiety and feelings of responsibility leading to decisions that lack reflexivity and may not be in line with the clients’ wishes (Ewers, Bradshaw, McGovern, and Ewers, 2002; Gumley & Schwannauer, 2006). Reduction in staff’s capacity to mentalize can be displayed through criticism, hostility, blaming or focussing on rules and other processes, ultimately leading to a breakdown in the therapeutic relationship (Bevington et al., 2013).

Additionally, those with psychosis may already be vulnerable to difficulties in relationships having a higher likelihood of childhood adversity, leading to insecure or avoidant attachment styles and decreased ability to mentalize (Hartley et al., 2016). This can have major consequences for interpersonal functioning and the individual’s ability to cope with distress



(Brune et al., 2011; Lysaker et al., 2011; Semerari et al., 2003). These difficulties may also be true for staff members; Berry et al. (2008) found lower levels of mentalizing in psychiatric staff who had insecure or avoidant attachment styles.

Throughout the interviews staff were aware that decisions made, although reducing short-term risk, would often lead to increased paranoia and hostility from clients. Research has found that these responses may trigger disruptive memories of neglect and abandonment (Dozier et al., 2008) within the individual seeking help and can further reduce mentalizing ability (Gibson, 2006). Within outpatient settings, service interactions can become 'crisis-driven responses' that reinforce existing negative expectations of help-seeking and perpetuate the cycle of poor engagement (Bevington et al., 2013; Gumley & Schwannauer, 2006). Within a help-seeking environment individuals with psychosis are especially alert to 'not being listened to' because of their 'symptoms' of psychosis (Hutton & Morrison, 2013); this, coupled with high levels of emotional arousal, can result in further reductions in mentalization capacity and relationships between staff and client can become fractured (Fine et al., 2007; Startup et al., 2008). The grounded theory therefore supports the emerging evidence suggesting that there is a link between attachment, mentalization and provision of care for individuals experiencing psychosis (Lysaker, 2011) and further the grounded theory proposes that this process is mediated by staff's ability to understand the underlying difficulties of the person with psychosis.

These interactions, as a result of reduced mentalization, also appeared to play a role in threatening a client's sense of identity and can be considered using the Social Identity approach (Tajfel & Turner, 1979). Staff narratives suggested that the greater the perceived loss of identity through an individual having psychosis, the greater their efforts to try to distance themselves from mental health staff and services, reinforcing the 'not knowing'. This finding suggests that there might remain high levels of stigma at receiving a psychotic illness diagnosis (Staring et al., 2009). From the interviews, it was this 'protection of identity' that was the perceived driving force behind an individual's 'lack of insight'. Results from this study therefore support the notion of 'insight' as a socio-cultural process (Saravanan et al., 2000), as it was perceived to preserve an individual's self-esteem and help them to regain some control during their interactions with mental-health services (Carrol et al., 2004; Fitzgerald et al., 2010). These results are supported by other large-scale qualitative studies finding that

enhanced recovery resulted where the client was able to re-define themselves and accept their illness, overcome stigma, and resume control and responsibility for their life (Davidson, 2003). Similarly, Dilks, Tasker & Wren. (2010) found that client's priority was primarily to 'function in a social world' and that perceived actions by staff to take them away from this could result in service disengagement. Staff frequently spoke about clients' traumatic experiences of 'receiving care' for psychosis; most commonly cited was the use of the MHA and inpatient admission. Fear of the consequences of 'opening up' about their psychotic experiences was one of the most commonly cited reasons by staff for the individual being guarded, resulting in an increased sense of the staff 'not knowing'. This seems to increase staff anxiety, decrease mentalization and unfortunately increase the chances of the client receiving an intervention that they might find traumatic. Thus the more restrictive/coercive the intervention, as a result of decreased staff mentalization, the more likely the individual is to feel traumatised, pushed towards a negatively-perceived 'psychosis' identity and want to avoid services in the future (Berry et al., 2015; Dolan & Whitworth, 2013; Laithwaite et al., 2007; Schizophrenia Commission, 2012). Therefore, the grounded theory proposes that reduced staff mentalization can lead to increased threats to client identity, increasing client guardedness and reinforcing the 'not-knowing'.

Staff also noted that it was more difficult to 'get to know' individuals who had experience of living in high Expressed Emotion (EE) environments. Due to these prior experiences, clients may be particularly alert to high EE within their interactions with staff. Research demonstrates that the lower the incidence of EE the better the staff-client relationship and vice versa (Berry et al., 2011; Tattan & Tarrier, 2000). Conversely, the more guarded the client becomes the greater the increased likelihood of EE as a result of increased anxiety and emotional arousal (Berry et al., 2011), leading to a further breakdown in the therapeutic alliance (Berry et al., 2012). Therefore, individuals' early experiences of trauma and emotional conflict can mean that they are particularly alert for this, resulting in them quickly becoming guarded in their interactions with staff.

Social factors were also hypothesised to play a role in the clients' sense of self and their ability to engage with mental-health professionals. Research supports this notion, finding that psychosis can lead to a decline in social functioning (Cannon et al., 2008; Cornblatt et al., 2007) that can increase the person's sense of hopelessness (Cornblatt et al., 2011; Roe, 2005),

increase self-stigma and depression (Lysaker et al., 2007) and negatively impact recovery rates (Janarthanan, Sathiyaseelen & Bharadwaj, 2016). It was hypothesised that increased stigma as a result of social difficulties may impact the way in which the client views themselves and will affect their perceptions of others' reactions towards them (McInnes, 2008). Therefore, the way in which staff and services interact with these individuals may be crucial in successful engagement of the client. Unfortunately, the reported staff experiences of changing and limited service provision could mean that the patterns of disengagement are reinforced, for example, where staff are not able to offer a service to those with 'no fixed abode' or are limited in offering an assertive outreach approach. Staff also reflected upon times of feeling unsafe and unsupported, acknowledging that this could result in less patient-centred responses which could reinforce the individual's sense of hopelessness, increase threats to identity and further increase barriers within the therapeutic alliance (Brent, 2015). Additionally, with reduction in resources to help clients with social difficulties, a key tenet of the Early Intervention (EI) approach (Edwards et al., 1994), individuals may go longer without forming a secure base, increasing the likelihood of engagement problems. Thus, previous patterns recur, reinforcing the 'not knowing' (Midgley & Vrouva, 2012).

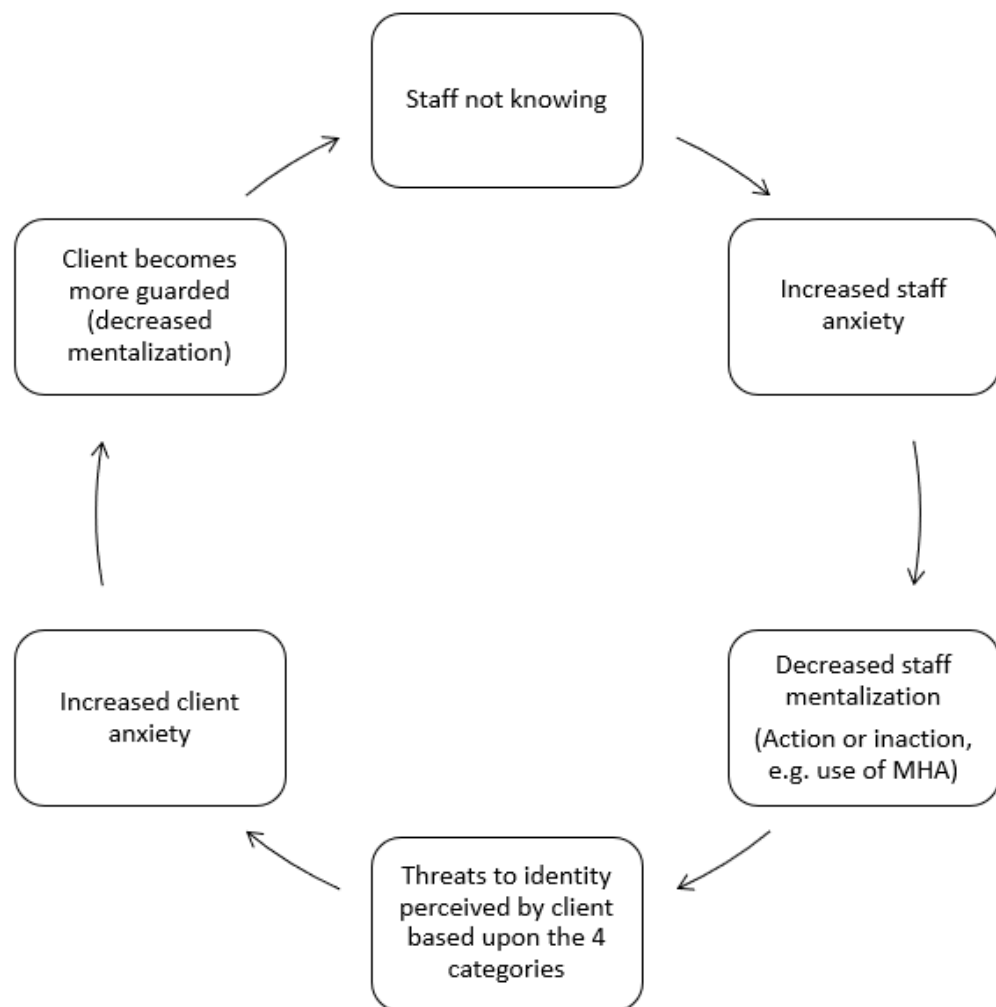
Further barriers to understanding the client were perceived to be caused by clients' impaired cognitive functioning. Cognitive deficits such as reduced working memory and executive functioning are commonly seen in people with psychosis (Green, 2006; Mulligan et al., 2017; Osuji & Callum, 2005). These difficulties were thought to affect the ability of the individual to remember appointments or take their medication. Lack of medication adherence was perceived as a risk factor for clients becoming increasingly unwell and disengaging further from the service (Mulligan et al., 2017), based on or exacerbating the mechanisms previously discussed. Non-attendance of appointments limits staffs ability to 'know' the individual, increasing the risk of anxiety, particularly for 'high risk' individuals. There is in this, the potential for more stringent interventions, like the implementation of a CTO, as well as the reinforcement of patterns of 'guardedness' and disengagement (Gumley & Schwannauer, 2006).

Throughout the interviews staff reflected upon the symptomology of 'psychosis itself' in posing a barrier to the formation of a relationship in which to learn more about each other. It is well known that key symptoms include paranoia, delusional beliefs and lack of insight

(Andreasen, 1982; Fletcher & Frith, 2009) all of which affect the therapeutic alliance (Wittorf et al., 2009). Additionally, there is known to be an association between psychosis and suicide (Hawton et al., 2005; Kelleher et al., 2013) and increased mortality (Sharifi et al., 2015) with studies suggesting that there is a 10% likelihood of individuals making a suicide attempt within the first year of accessing treatment for psychosis (Nordentoft, Madson & Fedszyn, 2015). There is also a perception that there may be potential risk to others due to someone's experiences of psychosis (Krakowski et al., 2009; Swanson et al., 2006). Therefore, it is understandable that staff working with those with psychosis may be more alert to potential risks, leading to increased anxiety and decreased mentalization. It also follows that the rhetoric around what it means to have 'psychosis' can cause individuals with this diagnosis to want to disassociate from it (Franz et al., 2010).

In summary, the very nature of 'psychosis' can put clients at risk of perceived threats to identity and reduced mentalization. Therefore, staff can feel as if they must carefully tread a line of engaging their clients whilst assessing and managing risk. Achieving this balance appears to be anxiety provoking for staff, especially with the knowledge that clients may quickly disengage. This can lead to reductions in staffs' mentalizing ability and inadvertently start/ re-start a cycle of disengagement and 'not knowing' (see figure 3).

**Figure 3.** A diagram showing the cyclical/ interactional process, between staff and client, that maintains client disengagement and staff 'not knowing'



Note. MHA = Mental Health Act

## **Implications for practice and research**

Results from this study advocate for a service approach that aims to reduce staff anxiety and enhance mentalization processes for both staff and client.

The Adaptive Mentalization-Based Integrative Therapy model (AMBIT; Bevington et al., 2013) is an example of an attachment-informed approach that asserts that a 'secure base' is required for both worker and client to enhance the ability of the individual to be able to make therapeutic change (Midgley & Vrouva, 2012). AMBIT advocates for robust organisational systems and strong supervisory structures to enhance effective team working, reducing staff anxiety and increasing mentalization (Fonagy et al., 2002). Taking this approach has been found to enhance staff and clients' ability to recognise and understand their own and others' cognitions, feelings and intents and will be likely to lead to improved therapeutic alliance (Hutton & Morrison, 2013; Senge, 2006).

A mentalization-based approach may also minimise the use and impact of high expressed-emotion. High expressed-emotion may increase where a behaviour is seen to be within the person's control, for example, for those whose psychosis is perceived to be 'drug-induced' (Barrowclough & Hooley, 2003; Berry et al., 2012). From a mentalization perspective, supporting the staff member to be more aware of alternative thoughts or motives behind the person's behaviour may support a more positive approach (Berry et al., 2008), improving the relationship and enhancing understanding.

Services must also be mindful of the impact of staff anxiety due to the impact this has on staff-members' ability to think psychologically and to form positive therapeutic relationship that aids understanding of the client (Hartley et al., 2014). Effective managerial support which monitors, and addresses staffs' emotional needs is therefore recommended (Berry & Drake, 2010; Bucci, Roberts, Danquah, & Berry, 2014). In addition, having a truly multi-disciplinary team that, although having their own caseloads, will be mutually supportive of each other's clients is important for reducing anxiety and increasing confidence in interventions offered (Stein & Stantos, 1998). This may lead to less stringent risk-management strategies being taken, keeping channels open with the client (Ewers, Bradshaw, McGovern, and Ewers, 2002; Gumley & Schwannauer, 2006).

These approaches may also play a key role in reducing perceived threats to clients' identity resulting in increased stigma and reduced 'insight' (Lysaker et al., 2006; Staring et al., 2008). Evidence has found that those treated within secure versus community settings are more likely to internalise stigma, have reduced insight and disengage from services (Fitzgerald, 2010), thus increasing the 'not knowing'. In general, insight literature lacks thought about the impact of accessing care and how coping with a mental health diagnosis can impact one's identity. Williams (2008) however, states that insight should be conceptualised as part of a post-diagnostic 'identity' that is in relation to other social identities and considers stigma against mental illness. This is important as it begins to consider others' responsibilities within the insight concept rather than seeing 'lack of insight' as being purely intra-personal. Services should, therefore, take a holistic approach, addressing financial and interpersonal difficulties, vocational and educational involvement, substance abuse, and suicidal ideation (McGrew et al., 1994; Nordentoft et al., 2015). Time given to focus on these interventions are again hypothesised to minimise ongoing threats to the client's identity and so will moderate the patterns identified within this research that lead to staff 'not knowing'.

Research into mentalization and psychosis is scarce; given the evidence demonstrating that both individuals with psychosis and the staff working with them are vulnerable to lapses in mentalizing capacity affecting understanding and communication (Dozier et al., 2008; Sharp & Fonagy, 2008; Sharp et al., 2011) this is an important area for further exploration.

The aim of the research was to propose initial hypotheses towards a developing theory which might merit subsequent validation through further research, as opposed to the unrealistic intention of producing a more fully developed theory. Therefore, further research is required to validate the findings from this study. To corroborate the theory further, a recommendation is that individuals experiencing psychosis are interviewed in a similar format. Themes can be compared to see how clients perceive their interactions with staff and services in gaining an understanding of their difficulties.

## **Strengths and limitations**

Procedures such as the constant comparison between and within the data, theoretical sampling and member reflections helped to ensure study rigour (Mays & Pope, 2000). Detailed memos and a reflexivity statement demonstrated transparency and is in line with the values of a social constructivist position and the aims of this research (O'Brien et al., 2014; Tracy, 2010).

Time and resource constraints meant that it was not possible to re-interview participants. This would have aided further validation of the emerging theory by giving participants the opportunity to clarify, review or amend findings. Additionally, the study would have benefitted from further cross-validation by including multiple researchers within the coding process. These triangulation techniques are recommended for future studies.

Finally, the nature of research aims increased the risk of findings being deduced from existing theory, due to the prior knowledge and experience of the author. To minimise this risk the methodological strengths noted above ensured findings were grounded within data (Charmez, 2006; Payne, 2008). However, from a constructivist viewpoint of no absolute truth, findings may not generalise to other settings or staff groups.



## **Conclusions**

To the author's knowledge, this is the first proposed theory of the interactional processes between staff and client in making sense of the individual's difficulties. Processes enhancing mentalizing are likely to lead to behaviours of self and others becoming more meaningful, predictable and explicable. This is hypothesised to enhance understanding and increase the probability that individuals will engage in meaningful and sustaining relationships, encourage feelings of being connected to others while maintaining a sense of individuality (Fonagy et al., 2002). It is important, therefore, that psychiatric services acknowledge the ways by which mentalization could influence staffs' ability to make sense of clients' difficulties, which could in turn affect the therapeutic relationship, reduce distressing experiences for the client and improve provision of care (Berry et al., 2008; Berry et al., 2012).

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### 1. SUBMISSION

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This is a journal for those who want to inform and be informed about the challenging field of clinical psychology and psychotherapy.

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**Research articles:** Substantial articles making a significant theoretical or empirical contribution (submissions should be limited to a maximum of 5,000 words).

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**Assessments:** Articles reporting useful information and data about new or existing measures.

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#### Parts of the Manuscript

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#### File types

Preferred formats for the text and tables of your manuscript are .doc, .docx, .rtf, .ppt, .xls. LaTeX files may be submitted provided that an .eps or .pdf file is provided in addition to the source files. Figures may be provided in .tiff or .eps format.

### *New Manuscript*

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6. Acknowledgments;
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Reference examples follow:

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Beers, S. R. , & De Bellis, M. D. (2002). Neuropsychological function in children with maltreatment-related posttraumatic stress disorder. *The American Journal of Psychiatry*, 159, 483–486. doi: [10.1176/appi.ajp.159.3.483](https://doi.org/10.1176/appi.ajp.159.3.483)

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Bradley-Johnson, S. (1994). *Psychoeducational assessment of students who are visually impaired or blind: Infancy through high school* (2nd ed.). Austin, TX: Pro-ed.

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Endnotes should be placed as a list at the end of the paper only, not at the foot of each page. They should be numbered in the list and referred to in the text with consecutive, superscript Arabic numerals. Keep endnotes brief; they should contain only short comments tangential to the main argument of the paper.

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Tables should be self-contained and complement, not duplicate, information contained in the text. They should be supplied as editable files, not pasted as images. Legends should be concise but comprehensive – the table, legend, and footnotes must be understandable without reference to the text. All abbreviations must be defined in footnotes. Footnote symbols: †, ‡, §, ¶, should be used (in that order) and \*, \*\*, \*\*\* should be reserved for P-values. Statistical measures such as SD or SEM should be identified in the headings.

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Although authors are encouraged to send the highest-quality figures possible, for peer-review purposes, a wide variety of formats, sizes, and resolutions are accepted. Click [here](#) for the basic figure requirements for figures submitted with manuscripts for initial peer review, as well as the more detailed post-acceptance figure requirements.

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2. **Units of measurement:** Measurements should be given in SI or SI-derived units. Visit the [Bureau International des Poids et Mesures \(BIPM\) website](#) for more information about SI units.
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## **Appendix A: Effective Public Health Practice Project (EPHPP) Quality Assessment Tool for Quantitative Studies**

## QUALITY ASSESSMENT TOOL FOR QUANTITATIVE STUDIES



### COMPONENT RATINGS

#### A) SELECTION BIAS

(Q1) Are the individuals selected to participate in the study likely to be representative of the target population?

- 1 Very likely
- 2 Somewhat likely
- 3 Not likely
- 4 Can't tell

(Q2) What percentage of selected individuals agreed to participate?

- 1 80 - 100% agreement
- 2 60 - 79% agreement
- 3 less than 60% agreement
- 4 Not applicable
- 5 Can't tell

RATE THIS SECTION	STRONG	MODERATE	WEAK
See dictionary	1	2	3

#### B) STUDY DESIGN

Indicate the study design

- 1 Randomized controlled trial
- 2 Controlled clinical trial
- 3 Cohort analytic (two group pre + post)
- 4 Case-control
- 5 Cohort (one group pre + post (before and after))
- 6 Interrupted time series
- 7 Other specify \_\_\_\_\_
- 8 Can't tell

Was the study described as randomized? If NO, go to Component C.

No Yes

If Yes, was the method of randomization described? (See dictionary)

No Yes

If Yes, was the method appropriate? (See dictionary)

No Yes

RATE THIS SECTION	STRONG	MODERATE	WEAK
See dictionary	1	2	3

**C) CONFOUNDERS****(Q1) Were there important differences between groups prior to the intervention?**

- 1 Yes
- 2 No
- 3 Can't tell

**The following are examples of confounders:**

- 1 Race
- 2 Sex
- 3 Marital status/family
- 4 Age
- 5 SES (income or class)
- 6 Education
- 7 Health status
- 8 Pre-intervention score on outcome measure

**(Q2) If yes, indicate the percentage of relevant confounders that were controlled (either in the design (e.g. stratification, matching) or analysis)?**

- 1 80 – 100% (most)
- 2 60 – 79% (some)
- 3 Less than 60% (few or none)
- 4 Can't Tell

RATE THIS SECTION	STRONG	MODERATE	WEAK
See dictionary	1	2	3

**D) BLINDING****(Q1) Was (were) the outcome assessor(s) aware of the intervention or exposure status of participants?**

- 1 Yes
- 2 No
- 3 Can't tell

**(Q2) Were the study participants aware of the research question?**

- 1 Yes
- 2 No
- 3 Can't tell

RATE THIS SECTION	STRONG	MODERATE	WEAK
See dictionary	1	2	3

**E) DATA COLLECTION METHODS****(Q1) Were data collection tools shown to be valid?**

- 1 Yes
- 2 No
- 3 Can't tell

**(Q2) Were data collection tools shown to be reliable?**

- 1 Yes
- 2 No
- 3 Can't tell

RATE THIS SECTION	STRONG	MODERATE	WEAK
See dictionary	1	2	3



**F) WITHDRAWALS AND DROP-OUTS****(Q1) Were withdrawals and drop-outs reported in terms of numbers and/or reasons per group?**

- 1 Yes
- 2 No
- 3 Can't tell
- 4 Not Applicable (i.e. one time surveys or interviews)

**(Q2) Indicate the percentage of participants completing the study. (If the percentage differs by groups, record the lowest).**

- 1 80 -100%
- 2 60 - 79%
- 3 less than 60%
- 4 Can't tell
- 5 Not Applicable (i.e. Retrospective case-control)

RATE THIS SECTION	STRONG	MODERATE	WEAK
See dictionary	1	2	3
			Not Applicable

**G) INTERVENTION INTEGRITY****(Q1) What percentage of participants received the allocated intervention or exposure of interest?**

- 1 80 -100%
- 2 60 - 79%
- 3 less than 60%
- 4 Can't tell

**(Q2) Was the consistency of the intervention measured?**

- 1 Yes
- 2 No
- 3 Can't tell

**(Q3) Is it likely that subjects received an unintended intervention (contamination or co-intervention) that may influence the results?**

- 4 Yes
- 5 No
- 6 Can't tell

**H) ANALYSES****(Q1) Indicate the unit of allocation (circle one)**

community   organization/institution   practice/office   individual

**(Q2) Indicate the unit of analysis (circle one)**

community   organization/institution   practice/office   individual

**(Q3) Are the statistical methods appropriate for the study design?**

- 1 Yes
- 2 No
- 3 Can't tell

**(Q4) Is the analysis performed by intervention allocation status (i.e. intention to treat) rather than the actual intervention received?**

- 1 Yes
- 2 No
- 3 Can't tell

**GLOBAL RATING****COMPONENT RATINGS**

Please transcribe the information from the gray boxes on pages 1-4 onto this page. See dictionary on how to rate this section.

<b>A</b>	<b>SELECTION BIAS</b>	<b>STRONG</b>	<b>MODERATE</b>	<b>WEAK</b>
		1	2	3
<b>B</b>	<b>STUDY DESIGN</b>	<b>STRONG</b>	<b>MODERATE</b>	<b>WEAK</b>
		1	2	3
<b>C</b>	<b>CONFOUNDERS</b>	<b>STRONG</b>	<b>MODERATE</b>	<b>WEAK</b>
		1	2	3
<b>D</b>	<b>BLINDING</b>	<b>STRONG</b>	<b>MODERATE</b>	<b>WEAK</b>
		1	2	3
<b>E</b>	<b>DATA COLLECTION METHOD</b>	<b>STRONG</b>	<b>MODERATE</b>	<b>WEAK</b>
		1	2	3
<b>F</b>	<b>WITHDRAWALS AND DROPOUTS</b>	<b>STRONG</b>	<b>MODERATE</b>	<b>WEAK</b>
		1	2	3
				Not Applicable

**GLOBAL RATING FOR THIS PAPER (circle one):**

- |   |          |                            |
|---|----------|----------------------------|
| 1 | STRONG   | (no WEAK ratings)          |
| 2 | MODERATE | (one WEAK rating)          |
| 3 | WEAK     | (two or more WEAK ratings) |

With both reviewers discussing the ratings:

Is there a discrepancy between the two reviewers with respect to the component (A-F) ratings?

No      Yes

If yes, indicate the reason for the discrepancy

- |   |   |
|---|---|
| 1 | Oversight                                 |
| 2 | Differences in interpretation of criteria |
| 3 | Differences in interpretation of study    |

**Final decision of both reviewers (circle one):**

- |   |          |
|---|----------|
| 1 | STRONG   |
| 2 | MODERATE |
| 3 | WEAK     |

# Quality Assessment Tool for Quantitative Studies Dictionary



The purpose of this dictionary is to describe items in the tool thereby assisting raters to score study quality. Due to under-reporting or lack of clarity in the primary study, raters will need to make judgements about the extent that bias may be present. When making judgements about each component, raters should form their opinion based upon information contained in the study rather than making inferences about what the authors intended. Mixed methods studies can be quality assessed using this tool with the quantitative component of the study.

## A) SELECTION BIAS

**(Q1)** Participants are more likely to be representative of the target population if they are randomly selected from a comprehensive list of individuals in the target population (score very likely). They may not be representative if they are referred from a source (e.g. clinic) in a systematic manner (score somewhat likely) or self-referred (score not likely).

**(Q2)** Refers to the % of subjects in the control and intervention groups that agreed to participate in the study before they were assigned to intervention or control groups.

## B) STUDY DESIGN

In this section, raters assess the likelihood of bias due to the allocation process in an experimental study. For observational studies, raters assess the extent that assessments of exposure and outcome are likely to be independent. Generally, the type of design is a good indicator of the extent of bias. In stronger designs, an equivalent control group is present and the allocation process is such that the investigators are unable to predict the sequence.

### Randomized Controlled Trial (RCT)

An experimental design where investigators randomly allocate eligible people to an intervention or control group. A rater should describe a study as an RCT if the randomization sequence allows each study participant to have the same chance of receiving each intervention and the investigators could not predict which intervention was next. If the investigators do not describe the allocation process and only use the words 'random' or 'randomly', the study is described as a controlled clinical trial.

See below for more details.

*Was the study described as randomized?*

Score YES, if the authors used words such as random allocation, randomly assigned, and random assignment.

Score NO, if no mention of randomization is made.

*Was the method of randomization described?*

Score YES, if the authors describe any method used to generate a random allocation sequence.

Score NO, if the authors do not describe the allocation method or describe methods of allocation such as alternation, case record numbers, dates of birth, day of the week, and any allocation procedure that is entirely transparent before assignment, such as an open list of random numbers of assignments.

If NO is scored, then the study is a controlled clinical trial.

### *Was the method appropriate?*

Score YES, if the randomization sequence allowed each study participant to have the same chance of receiving each intervention and the investigators could not predict which intervention was next. Examples of appropriate approaches include assignment of subjects by a central office unaware of subject characteristics, or sequentially numbered, sealed, opaque envelopes.

Score NO, if the randomization sequence is open to the individuals responsible for recruiting and allocating participants or providing the intervention, since those individuals can influence the allocation process, either knowingly or unknowingly.

If NO is scored, then the study is a controlled clinical trial.

### **Controlled Clinical Trial (CCT)**

An experimental study design where the method of allocating study subjects to intervention or control groups is open to individuals responsible for recruiting subjects or providing the intervention. The method of allocation is transparent before assignment, e.g. an open list of random numbers or allocation by date of birth, etc.

### **Cohort analytic (two group pre and post)**

An observational study design where groups are assembled according to whether or not exposure to the intervention has occurred. Exposure to the intervention is not under the control of the investigators. Study groups might be non-equivalent or not comparable on some feature that affects outcome.

### **Case control study**

A retrospective study design where the investigators gather 'cases' of people who already have the outcome of interest and 'controls' who do not. Both groups are then questioned or their records examined about whether they received the intervention exposure of interest.

### **Cohort (one group pre + post (before and after))**

The same group is pretested, given an intervention, and tested immediately after the intervention. The intervention group, by means of the pretest, act as their own control group.

### **Interrupted time series**

A study that uses observations at multiple time points before and after an intervention (the 'interruption'). The design attempts to detect whether the intervention has had an effect significantly greater than any underlying trend over time. Exclusion: Studies that do not have a clearly defined point in time when the intervention occurred and at least three data points before and three after the intervention

### **Other:**

One time surveys or interviews

## **C) CONFOUNDERS**

By definition, a confounder is a variable that is associated with the intervention or exposure and causally related to the outcome of interest. Even in a robust study design, groups may not be balanced with respect to important variables prior to the intervention. The authors should indicate if confounders were controlled in the design (by stratification or matching) or in the analysis. If the allocation to intervention and control groups is randomized, the authors must report that the groups were balanced at baseline with respect to confounders (either in the text or a table).

## **D) BLINDING**

(Q1) Assessors should be described as blinded to which participants were in the control and intervention groups. The purpose of blinding the outcome assessors (who might also be the care providers) is to protect against detection bias.

(Q2) Study participants should not be aware of (i.e. blinded to) the research question. The purpose of blinding the participants is to protect against reporting bias.

**E) DATA COLLECTION METHODS**

Tools for primary outcome measures must be described as reliable and valid. If 'face' validity or 'content' validity has been demonstrated, this is acceptable. Some sources from which data may be collected are described below:

Self reported data includes data that is collected from participants in the study (e.g. completing a questionnaire, survey, answering questions during an interview, etc.).

Assessment/Screening includes objective data that is retrieved by the researchers. (e.g. observations by investigators).

Medical Records/Vital Statistics refers to the types of formal records used for the extraction of the data.

**Reliability and validity can be reported in the study or in a separate study. For example, some standard assessment tools have known reliability and validity.**

**F) WITHDRAWALS AND DROP-OUTS**

Score **YES** if the authors describe BOTH the numbers and reasons for withdrawals and drop-outs.

Score **NO** if either the numbers or reasons for withdrawals and drop-outs are not reported.

Score **NOT APPLICABLE** if the study was a one-time interview or survey where there was not follow-up data reported.

The percentage of participants completing the study refers to the % of subjects remaining in the study at the final data collection period in all groups (i.e. control and intervention groups).

**G) INTERVENTION INTEGRITY**

The number of participants receiving the intended intervention should be noted (consider both frequency and intensity). For example, the authors may have reported that at least 80 percent of the participants received the complete intervention. The authors should describe a method of measuring if the intervention was provided to all participants the same way. As well, the authors should indicate if subjects received an unintended intervention that may have influenced the outcomes. For example, co-intervention occurs when the study group receives an additional intervention (other than that intended). In this case, it is possible that the effect of the intervention may be over-estimated. Contamination refers to situations where the control group accidentally receives the study intervention. This could result in an under-estimation of the impact of the intervention.

**H) ANALYSIS APPROPRIATE TO QUESTION**

Was the quantitative analysis appropriate to the research question being asked?

An intention-to-treat analysis is one in which all the participants in a trial are analyzed according to the intervention to which they were allocated, whether they received it or not. Intention-to-treat analyses are favoured in assessments of effectiveness as they mirror the noncompliance and treatment changes that are likely to occur when the intervention is used in practice, and because of the risk of attrition bias when participants are excluded from the analysis.

### **Component Ratings of Study:**

For each of the six components A – F, use the following descriptions as a roadmap.

#### **A) SELECTION BIAS**

**Good:** The selected individuals are very likely to be representative of the target population (Q1 is 1) **and** there is greater than 80% participation (Q2 is 1).

**Fair:** The selected individuals are at least somewhat likely to be representative of the target population (Q1 is 1 or 2); **and** there is 60 - 79% participation (Q2 is 2). 'Moderate' may also be assigned if Q1 is 1 or 2 and Q2 is 5 (can't tell).

**Poor:** The selected individuals are not likely to be representative of the target population (Q1 is 3); **or** there is less than 60% participation (Q2 is 3) **or** selection is not described (Q1 is 4); and the level of participation is not described (Q2 is 5).

#### **B) DESIGN**

**Good:** will be assigned to those articles that described RCTs and CCTs.

**Fair:** will be assigned to those that described a cohort analytic study, a case control study, a cohort design, or an interrupted time series.

**Weak:** will be assigned to those that used any other method or did not state the method used.

#### **C) CONFOUNDERS**

**Good:** will be assigned to those articles that controlled for at least 80% of relevant confounders (Q1 is 2); **or** (Q2 is 1).

**Fair:** will be given to those studies that controlled for 60 – 79% of relevant confounders (Q1 is 1) **and** (Q2 is 2).

**Poor:** will be assigned when less than 60% of relevant confounders were controlled (Q1 is 1) **and** (Q2 is 3) **or** control of confounders was not described (Q1 is 3) **and** (Q2 is 4).

#### **D) BLINDING**

**Good:** The outcome assessor is not aware of the intervention status of participants (Q1 is 2); **and** the study participants are not aware of the research question (Q2 is 2).

**Fair:** The outcome assessor is not aware of the intervention status of participants (Q1 is 2); **or** the study participants are not aware of the research question (Q2 is 2).

**Poor:** The outcome assessor is aware of the intervention status of participants (Q1 is 1); **and** the study participants are aware of the research question (Q2 is 1); **or** blinding is not described (Q1 is 3 and Q2 is 3).

#### **E) DATA COLLECTION METHODS**

**Good:** The data collection tools have been shown to be valid (Q1 is 1); **and** the data collection tools have been shown to be reliable (Q2 is 1).

**Fair:** The data collection tools have been shown to be valid (Q1 is 1); **and** the data collection tools have not been shown to be reliable (Q2 is 2) **or** reliability is not described (Q2 is 3).

**Poor:** The data collection tools have not been shown to be valid (Q1 is 2) **or** both reliability and validity are not described (Q1 is 3 and Q2 is 3).

#### **F) WITHDRAWALS AND DROP-OUTS - a rating of:**

**Good:** will be assigned when the follow-up rate is 80% or greater (Q1 is 1 and Q2 is 1).

**Fair:** will be assigned when the follow-up rate is 60 – 79% (Q2 is 2) **OR** Q1 is 4 or Q2 is 5.

**Poor:** will be assigned when a follow-up rate is less than 60% (Q2 is 3) or if the withdrawals and drop-outs were not described (Q1 is No or Q2 is 4).

**Not Applicable:** if Q1 is 4 or Q2 is 5.

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OnlineOpen is available to authors of primary research articles who wish to make their article available to non-subscribers on publication, or whose funding agency requires grantees to archive the final version of their article. With OnlineOpen, the author, the author's funding agency, or the author's institution pays a fee to ensure that the article is made available to non-subscribers upon publication via Wiley Online Library, as well as deposited in the funding agency's preferred archive. For the full list of terms and conditions, see [http://wileyonlinelibrary.com/onlineopen#OnlineOpen\\_Terms](http://wileyonlinelibrary.com/onlineopen#OnlineOpen_Terms)

Any authors wishing to send their paper OnlineOpen will be required to complete the payment form available from our website at: <https://onlinelibrary.wiley.com/onlineOpenOrder>

Prior to acceptance there is no requirement to inform an Editorial Office that you intend to publish your paper OnlineOpen if you do not wish to. All OnlineOpen articles are treated in the same way

as any other article. They go through the journal's standard peer-review process and will be accepted or rejected based on their own merit.

## 10. Author Services

Author Services enables authors to track their article – once it has been accepted – through the production process to publication online and in print. Authors can check the status of their articles online and choose to receive automated e-mails at key stages of production. The author will receive an e-mail with a unique link that enables them to register and have their article automatically added to the system. Please ensure that a complete e-mail address is provided when submitting the manuscript. Visit <http://authorservices.wiley.com/bauthor/> for more details on online production tracking and for a wealth of resources including FAQs and tips on article preparation, submission and more.

## 11. The Later Stages

The corresponding author will receive an email alert containing a link to a web site. A working e-mail address must therefore be provided for the corresponding author. The proof can be downloaded as a PDF (portable document format) file from this site. Acrobat Reader will be required in order to read this file. This software can be downloaded (free of charge) from the following web site: <http://www.adobe.com/products/acrobat/readstep2.html>. This will enable the file to be opened, read on screen and annotated direct in the PDF. Corrections can also be supplied by hard copy if preferred. Further instructions will be sent with the proof. Hard copy proofs will be posted if no e-mail address is available. Excessive changes made by the author in the proofs, excluding typesetting errors, will be charged separately.

## 12. Early View

The British Journal of Psychology is covered by the Early View service on Wiley Online Library. Early View articles are complete full-text articles published online in advance of their publication in a printed issue. Articles are therefore available as soon as they are ready, rather than having to wait for the next scheduled print issue. Early View articles are complete and final. They have been fully reviewed, revised and edited for publication, and the authors' final corrections have been incorporated. Because they are in final form, no changes can be made after online publication. The nature of Early View articles means that they do not yet have volume, issue or page numbers, so they cannot be cited in the traditional way. They are cited using their Digital Object Identifier (DOI) with no volume and issue or pagination information. E.g., Jones, A.B. (2010). Human rights Issues. Human Rights Journal. Advance online publication. doi:10.1111/j.1467-9299.2010.00300.x

Further information about the process of peer review and production can be found in this document: [What happens to my paper?](#) Appeals are handled according to [the procedure recommended by COPE](#).

#### **Appendix 4: Statement of reflexivity**

The following statement was written by the lead researcher in October 2018. It aims to aid the transparency of this research.

Prior to embarking on the Clinical Psychology training I spent three years working within acute inpatient and outpatient mental health services as a support worker. I followed this by spending two years as a care co-ordinator working within an Early intervention in Psychosis service. It is through these experiences that I developed a keen interest in looking at ways of enhancing care to those with Psychosis.

My experiences led me to believe that this client group could, at times, be very challenging to work with but that there were ways of engaging with these individual's. The early intervention service within which I had worked was run very much how an EI service was set out to be run and as such I really saw the benefits of it in engaging younger people with Psychosis.

Within the acute services it was often much more difficult to engage the individuals with Psychosis due to their illness normally being at its peak. Often the level of risk they posed to themselves or others meant that they would 'have' to be sectioned or told to take medication. I had the belief that these were often necessary actions to be taken in order to reduce the psychotic symptoms and to help the individual to get to a place of feeling less distressed and wanting to receive help. At times this could work very well but there were certain individual's that really stood out in my mind as almost being 'destroyed' by their contact with mental health services and Psychosis itself. Having said this, at the time, and given the severity of one particular young person's illness/ level of risk – it again felt that the decisions made were needed. However, this person, that was once friendly and approachable, became scary and entirely unapproachable. I suspect we as healthcare staff became the same to her. Although I thought about the role of medication in this I didn't really think beyond that.

I noticed upon starting the clinical Psychology training the often very negative views of trainee Psychologists towards giving Individuals with mental health difficulties medication. I felt that they were probably being naïve and not understanding the potential positive impact that medication can have and the negative impact that untreated Psychosis can have. I recognised the belief that sometimes staff and clinicians having strong views on a way in which a service user should or shouldn't be treated and that in itself can be unhelpful for the people that they are working with. I remember attending an EI in Psychosis conference and hearing the disdain towards Psychiatrists from certain clinicians and service users as to the 'evils of medication' and inflicting it upon them. Ultimately, I could feel the massive barrier between staff and service users, part of which appeared to be maintained by differing opinions of staff. I recognise the view I have that although it is important that staff can advocate for their clients, they have to be mindful that this is done in such a way as to promote positive engagement with staff and services. It also seems that staff should be open minded about the fact that things working differently for different people.

These experiences made me think more about how different staff understand Psychosis and the impact that this can have on the people with whom they work. It was this idea that inspired my research project.

## Appendix 5: Confirmation of REC and site-specific ethical approval

**WoSRES**  
*West of Scotland Research Ethics Service*



Mrs Laura Corfield  
Clinical Psychology  
Doorway 6, Medical Quad  
Teviot Place, Edinburgh  
EH8 9AG

### **West of Scotland REC 5**

West of Scotland Research Ethics Service  
West Glasgow Ambulatory Care Hospital  
Dalnair Street  
Glasgow  
G3 8SJ

Date 06 December 2017

Direct line 0141 232 1809  
E-mail WoSREC5@ggc.scot.nhs.uk

Dear Mrs Corfield

**Study title:** An exploration into how individuals with Psychosis and the staff supporting them, conceptualise the difficulties associated with this diagnosis.  
**REC reference:** 17/WS/0254  
**Protocol number:** CAHSS1710/06  
**IRAS project ID:** 234770

The Proportionate Review Sub-committee of the West of Scotland REC 5 reviewed the above application on 06 December 2017.

We plan to publish your research summary wording for the above study on the HRA website, together with your contact details. Publication will be no earlier than three months from the date of this favourable opinion letter. The expectation is that this information will be published for all studies that receive an ethical opinion but should you wish to provide a substitute contact point, wish to make a request to defer, or require further information, please contact [hra.studyregistration@nhs.net](mailto:hra.studyregistration@nhs.net) outlining the reasons for your request. Under very limited circumstances (e.g. for student research which has received an unfavourable opinion), it may be possible to grant an exemption to the publication of the study.

### **Ethical opinion**

On behalf of the Committee, the sub-committee gave a favourable ethical opinion of the above research on the basis described in the application form, protocol and supporting documentation, subject to the conditions specified below.

### **Conditions of the favourable opinion**

The REC favourable opinion is subject to the following conditions being met prior to the start of the study.

1. The study title in the Staff Participant Information Sheet and Consent form should be the same as the one stated in the Service Users documentation.

2. In the Young Person PIS, the term "peer reviewed journal" should be changed to language that a 14 year old would understand eg "medical magazine (journal)".
3. In the Service Users Consent form, an additional sentence should be added to the end of statement 3: "I understand that I can get a copy of my interview if I wish."
4. In the GP letter, the word "working/" should be removed from the second paragraph if it is not applicable to the patient.
5. As a minor comment, the name of the approving/reviewing REC should be changed to "West of Scotland" from "East of Scotland" in all Information Sheets and the GP letter.

**You should notify the REC once all conditions have been met (except for site approvals from host organisations) and provide copies of any revised documentation with updated version numbers. Revised documents should be submitted to the REC electronically from IRAS. The REC will acknowledge receipt and provide a final list of the approved documentation for the study, which you can make available to host organisations to facilitate their permission for the study. Failure to provide the final versions to the REC may cause delay in obtaining permissions.**

Management permission must be obtained from each host organisation prior to the start of the study at the site concerned.

*Management permission should be sought from all NHS organisations involved in the study in accordance with NHS research governance arrangements. Each NHS organisation must confirm through the signing of agreements and/or other documents that it has given permission for the research to proceed (except where explicitly specified otherwise).*

*Guidance on applying for HRA Approval (England)/ NHS permission for research is available in the Integrated Research Application System, [www.hra.nhs.uk](http://www.hra.nhs.uk) or at <http://www.rdforum.nhs.uk>.*

*Where a NHS organisation's role in the study is limited to identifying and referring potential participants to research sites ("participant identification centre"), guidance should be sought from the R&D office on the information it requires to give permission for this activity.*

*For non-NHS sites, site management permission should be obtained in accordance with the procedures of the relevant host organisation.*

*Sponsors are not required to notify the Committee of management permissions from host organisations.*

#### Registration of Clinical Trials

All clinical trials (defined as the first four categories on the IRAS filter page) must be registered on a publically accessible database. This should be before the first participant is recruited but no later than 6 weeks after recruitment of the first participant.

There is no requirement to separately notify the REC but you should do so at the earliest opportunity e.g. when submitting an amendment. We will audit the registration details as part of the annual progress reporting process.

If a sponsor wishes to request a deferral for study registration within the required timeframe, they should contact [hra.studyregistration@nhs.net](mailto:hra.studyregistration@nhs.net). The expectation is that all clinical trials will be registered, however, in exceptional circumstances non registration may be permissible with prior agreement from the HRA. Guidance on where to register is provided on the HRA website.

**It is the responsibility of the sponsor to ensure that all the conditions are complied with before the start of the study or its initiation at a particular site (as applicable).**

#### **Ethical review of research sites**

The favourable opinion applies to all NHS sites taking part in the study, subject to management permission being obtained from the NHS/HSC R&D office prior to the start of the study (see "Conditions of the favourable opinion").

#### **Summary of discussion at the meeting (for information only)**

##### **Social or scientific value; scientific design and conduct of the study**

The Committee asked the researcher to clarify what type of study this is as the IRAS form states that it is a qualitative study but the protocol states it is an embedded mixed-methods study.

*Via email, you advised that the study is qualitative. To enhance the qualitative grounded theory analysis, a couple of quantitative self-report measures will be conducted. This will be to give another dimension to the qualitative analysis rather than being a separate quantitative analysis.*

The Committee were satisfied with this response.

##### **Informed consent process and the adequacy and completeness of participant information**

It was noted that the Service user Information Sheet states that participants will be given the choice to receive a typed copy of their interview. It was suggested that it might be helpful to also include this in the Consent form as a reminder.

In the Young person PIS, it was queried whether a 14 year old would know what a "peer reviewed journal" is.

The Committee noted that the study title in the Service Users and in the Staff information documents were different. This could cause confusion eg if the study was to be audited.

##### **Suitability of supporting information**

The PISs and GP letter states the name of the approving REC as "East of Scotland", which should be changed.

Also in the GP letter, it was not clear whether the word "working" in the second paragraph is required as it was presumed that the "individual" that is referred to in the letter is a patient and not a staff member.

#### **Approved documents**

The documents reviewed and approved were:

<i>Document</i>	<i>Version</i>	<i>Date</i>
Copies of advertisement materials for research participants [Service-user poster]	1	01 November 2017
Copies of advertisement materials for research participants [Staff poster]	1	01 November 2017
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Employers liability certificate]		31 July 2018
GP/consultant information sheets or letters [GP letter]	1	01 November 2017
Interview schedules or topic guides for participants [Example interview questions]	1	01 November 2017
IRAS Application Form [IRAS_Form_17112017]		17 November 2017
Participant consent form [Service-user consent form]	1	01 November 2017
Participant consent form [Staff consent form]	1	01 November 2017
Participant consent form [Young person consent form]	1	01 November 2017
Participant information sheet (PIS) [Service-user PIS]	1	01 November 2017
Participant information sheet (PIS) [Staff PIS]	1	01 November 2017
Participant information sheet (PIS) [Young person PIS]	1	01 November 2017
Research protocol or project proposal [Study Protocol]	1	01 November 2017
Summary CV for Chief Investigator (CI) [CV, Principal investigator]	1	01 November 2017
Summary CV for supervisor (student research) [CV H.G.]		21 July 2017
Summary CV for supervisor (student research) [CV M.S.]		
Validated questionnaire [RFQ8]	1	01 November 2017
Validated questionnaire [ECR-R]	1	01 November 2017

### **Membership of the Proportionate Review Sub-Committee**

The members of the Sub-Committee who took part in the review are listed on the attached sheet.

### **Statement of compliance**

The Committee is constituted in accordance with the Governance Arrangements for Research Ethics Committees and complies fully with the Standard Operating Procedures for Research Ethics Committees in the UK.

### **After ethical review**

#### Reporting requirements

The attached document "After ethical review – guidance for researchers" gives detailed guidance on reporting requirements for studies with a favourable opinion, including:

- Notifying substantial amendments
- Adding new sites and investigators
- Notification of serious breaches of the protocol
- Progress and safety reports
- Notifying the end of the study



### User Feedback

The Health Research Authority is continually striving to provide a high quality service to all applicants and sponsors. You are invited to give your view of the service you have received and the application procedure. If you wish to make your views known please use the feedback form available on the HRA website: <http://www.hra.nhs.uk/about-the-hra/governance/quality-assurance/>

### HRA Training

We are pleased to welcome researchers and R&D staff at our training days – see details at <http://www.hra.nhs.uk/hra-training/>

With the Committee's best wishes for the success of this project.

**17/WS/0254**

**Please quote this number on all correspondence**

Yours sincerely



for

**Canon Matt McManus**  
**Vice-Chair**

Enclosures:                      List of names and professions of members who took part in the review  
   "After ethical review – guidance for researchers"

Copy to:                            Mrs Charlotte Smith, University of Edinburgh  
   Miss Melissa Taylor, NHS Lothian



University Hospitals Division



Queen's Medical Research Institute  
47 Little France Crescent, Edinburgh, EH16 4TJ

FM/CF/approval

12 December 2017

Mrs Laura Corfield  
University of Edinburgh  
Medical School  
Teviot Place  
Edinburgh  
EH8 9AG

Research & Development  
Room E1.16  
Tel: 0131 242 3330

Email:  
accord@nhslothian.scot.nhs.uk

Director: Professor Tim Walsh

Dear Mrs Laura Corfield

Lothian R&D Project No: 2017/0312

REC No: 17/WS/0254

**Title of Research:** An exploration into how individuals with Psychosis and the staff supporting them, conceptualise the difficulties associated with this diagnosis

**Participant Information Sheet:**

Version 2.0, dated 8 December 2017 (Young Person)  
Version 2.0, dated 8 December 2017 (Service User)  
Version 2.0, dated 8 December 2017 (Staff)

**Consent Form:**

Version 1.0, dated 1 November 2017 (Young Person)  
Version 2.0, dated 8 December 2017 (Service User)  
Version 2.0, dated 8 December 2017 (Staff)

**Protocol:** Version 1.0, dated 1 November 2017

I am pleased to inform you this letter provides Site Specific approval for NHS Lothian for the above study and you may proceed with your research, subject to the conditions below.

Please note that the NHS Lothian R&D Office must be informed of any changes to the study such as amendments to the protocol, funding, recruitment, personnel or resource input required of NHS Lothian.

Substantial amendments to the protocol will require approval from the ethics committee which approved your study and the MHRA where applicable.

Please keep this office informed of the following study information, which is a condition of NHS Lothian R&D Management Approval:

1. Date you are ready to begin recruitment, date of the recruitment of the first participant and the monthly recruitment figures thereafter.
2. Date the final participant is recruited and the final recruitment figures.
3. Date your study / trial is completed within NHS Lothian.

I wish you every success with your study.

Yours sincerely

*Fiona McArdle*

Ms Fiona McArdle  
Deputy R&D Director

CC: Mr Tim Montgomery, Director of Operations, REH

Mrs Laura Corfield  
Clinical Psychology  
Doorway 6, Medical Quad  
Teviot Place, Edinburgh  
EH8 9AG

**West of Scotland REC 5**  
West of Scotland Research Ethics Service  
West Glasgow Ambulatory Care Hospital  
Dalnair Street  
Glasgow  
G3 8SW

Date 11 December 2017

Direct line 0141 232 1804  
E-mail WoSREC5@ggc.scot.nhs.uk

Dear Mrs Corfield

**Study title:** An exploration into how individuals with Psychosis and the staff supporting them, conceptualise the difficulties associated with this diagnosis.

**REC reference:** 17/WS/0254  
**Protocol number:** CAHSS1710/06  
**IRAS project ID:** 234770

I can confirm the REC has received the documents listed below and that these comply with the approval conditions detailed in our letter dated 06 December 2017

#### Documents received

The documents received were as follows:

Document	Version	Date
GP/consultant information sheets or letters [GP letter]	2	08 December 2017
Participant consent form [Service-user consent form]	2	08 December 2017
Participant consent form [Staff consent form]	2	08 December 2017
Participant information sheet (PIS) [Service-user PIS]	2	08 December 2017
Participant information sheet (PIS) [Staff PIS]	2	08 December 2017
Participant information sheet (PIS) [Young person PIS]	2	08 December 2017

#### Approved documents

The final list of approved documentation for the study is therefore as follows:

<i>Document</i>	<i>Version</i>	<i>Date</i>
Copies of advertisement materials for research participants [Service-user poster]	1	01 November 2017
Copies of advertisement materials for research participants [Staff poster]	1	01 November 2017
Evidence of Sponsor insurance or indemnity (non NHS Sponsors only) [Employers liability certificate]		31 July 2018
GP/consultant information sheets or letters [GP letter]	2	08 December 2017
Interview schedules or topic guides for participants [Example interview questions]	1	01 November 2017
IRAS Application Form [IRAS_Form_17112017]		17 November 2017
Participant consent form [Young person consent form]	1	01 November 2017
Participant consent form [Service-user consent form]	2	08 December 2017
Participant consent form [Staff consent form]	2	08 December 2017
Participant information sheet (PIS) [Service-user PIS]	2	08 December 2017
Participant information sheet (PIS) [Staff PIS]	2	08 December 2017
Participant information sheet (PIS) [Young person PIS]	2	08 December 2017
Research protocol or project proposal [Study Protocol]	1	01 November 2017
Summary CV for Chief Investigator (CI) [CV, Principal investigator]	1	01 November 2017
Summary CV for supervisor (student research) [CV H.G.]		21 July 2017
Summary CV for supervisor (student research) [CV M.S.]		
Validated questionnaire [RFQ8]	1	01 November 2017
Validated questionnaire [ECR-R]	1	01 November 2017

You should ensure that the sponsor has a copy of the final documentation for the study. It is the sponsor's responsibility to ensure that the documentation is made available to R&D offices at all participating sites.

**17/WS/0254**

**Please quote this number on all correspondence**

Yours sincerely



**Rose Gallacher**  
**Assistant Administrator**

Copy to: Mrs Charlotte Smith, University of Edinburgh  
Miss Melissa Taylor, NHS Lothian Research & Development Office

## Appendix 6: Copy of participant consent form



### CONSENT FORM FOR STAFF PARTICIPANTS



**Title of Project:** Experiences of seeking support for Psychosis

**Name of Researcher:** Mrs Laura Corfield

**Please initial the boxes if you agree with the following statements**

1. I confirm that I have read and understand the information sheet Version 1, dated 01/10/2017 of the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☐
2. I understand that my participation in this research is voluntary and that I am free to withdraw at any time without giving any reason. ☐
3. I understand that relevant sections of my data collected during the study may be looked at by individuals from the regulatory authorities and from the Sponsors (NHS Lothian and the University of Edinburgh), where it is relevant to my taking part in this research. ☐
4. I give permission for my GP to be made aware of my participation in this study. ☐
5. The Chief Investigator (Laura Corfield) will have access to all the research data. An independent company will have access to the audio-recorded interviews for transcription purposes. Academic Supervisors (Dr Helen Griffiths and Matthias Schwannauer) and Clinical Supervisor (Dr Sean Harper) will have access to the data collected once anonymised. I give permission for these individuals to access this data. ☐
6. I have been made aware that direct quotes may be used in the write up of the research. These quotes will be anonymised. I agree to the use of direct quotes. ☐
7. I agree to my interview being audio recorded. I understand that this recording will be destroyed within one month of study completion. ☐
8. I agree to take part in the above study. ☐
9. I would like the researcher to send me information about the findings from this research. **Yes/No (please delete as applicable)**

Name of participant:

Date:

Signature:

Name of person:  
taking consent

Date:

Signature:

Original (x1) to be retained in site file. Copy (x1) to be retained by the participant.

## Appendix 7: Examples of coding

The following excerpt is taken from one transcript (P08) to evidence a mix of line-by-line and focused coding, alongside abbreviated memos.

Transcript (P08)	Coding	Notes from memos
<p>I: So you think his earlier experiences have transferred across?</p> <p><b>P: Yes, and I think, and I guess, I think the police had probably bought him in as well and I think it's being detained the first time, and so I think that everybody in positions of authority had been pretty horrible to him.</b></p> <p>I: And how did you manage that?</p> <p><b>P: I suppose we, I think that at xxxx (service provider) we are quite good at managing that. We do assertive outreach as much as we can, but he, I played it very low-key and tried to, I didn't talk too much about medicine, and didn't pressurise him in appointments too much about symptoms. I tried to find out more about him really. He was apparently a very good footballer once. So just go slow, try to do the engagement and gosh it's hard to actually put all that kind of softer stuff into words. We kept appointments short, tried to non- medicalised it, tried to find out about him and non-threatening topics of conversation whilst at the</b></p>	<p>Bought in by police Being detained under MHA Dislike of people in authority Horrible experience</p> <p>Assertive outreach approach Staff feels service good at that Strategies to try to engage IwP 'playing it low-key' Trying not to talk about medication too much Trying not to pressurise IwP Trying not to talk about symptoms Attempts to find out more about IwP Other interests outside of Psychosis Slow approach to engagement Staff acknowledging difficulty in engaging IwP 'soft' approach to engaging IwP Adapting appointment length Try to 'non-medicalise' it to keep IwP engaged Trying to find out about IwP Trying to find non-threatening topics to talk about</p>	<p>There seems to be a complex i interplay between the staff member keeping their distance in a bid to not force the relationship and to help the person to open up to them. Could this have the adverse effect of actually creating a greater divide between staff member and patient. There was real sense of pressure to not push the person away but to still be able to help them and to manage risk.</p> <p>This is another example of how early life experience may shape the IwP's reaction to current relationships with care-givers. This seems to be a barrier to engagement.</p> <p>Staff often appear to have to hypothesis rather than 'know' what is going on for an individual. Although a working hypothesis is important I wonder at what point just 'guessing' and not knowing matters? Does it matter? What is good enough for the IwP</p>

*same time obviously observing his mental state but also asking a few things about symptoms. We got him involved in, we were constantly flagging up that we thought he responded better to male figures, whatever that was about, although I don't think we were anywhere near ever knowing what that was about. So, we were trying to think creatively about why, you know, we think he is suspicious of females, but in particular umm, possibly mum. But you know, who knows what is going on.*

Still trying to be aware of mental state, balancing this with engagement  
Awareness of what staff he might respond better to  
Not sure why lwP responded better to male staff  
Not knowing  
Trying to think creatively  
Hypothesising why he might not like females  
Could it be to do with his Mum (past experiences shaping current reactions)  
lwP suspicious  
Not knowing

## Appendix 8: Example of Memos

Memos were written after each interview and transcription. Memos included observations of staff, reflections on the interviews and thoughts with regards interpretation of the data. Following interviews a review of previous memos was also conducted to see if any ideas were beginning to emerge and to help show a logical progression of ideas.

Below is an example of a memo written immediately following an interview and then further reflecting upon what might lead to more positive versus negative outcomes of the IwP, particularly regarding insight. Another interview brought up similar themes and so was added in with this memo

Themes that seem to emerge from interview with P09;

The power of family involvement, particularly when it comes to engaging the person - it is much more talked about in work with YP. P09 also speaks about if the person understands/ can make sense of their difficulties - that seems to have strong links with 'insight' but also how unwell the IwP is. Worth looking out for this in future interview.

There seems to be some differing explanations for insight emerging.

1. Just part of the illness
2. Not opening up about knowing they are unwell because of fear of consequences
3. A defence against admitting to themselves what has happened - this may be linked to an already fragile sense of self as a result of earlier life trauma.

Again end of ppt 13 gives nice examples of how the individual's ability to make sense of their difficulties impacts their recovery

This idea also seems to be supported by P14 gives an example of the person being very unwell it seems that they are still engaged due to the fact that they have a better understanding of their difficulties. Thinking of the recent paper I read (Flannagan) could this be an example of someone who hasn't internalised the stigma re. Psychosis and so has maintained a more positive sense of self?

Below is an example of a memo written around the reflections to do with action versus inaction and beginning to make links to this and mentalization as an underlying process. As this came up within further interviews this was reflected upon and added into this memo.

Interview with P04: This is the first time this has come up - being very careful about what actions to take and times when inaction may actually be the best course of action

An idea from staff seems to be around the lack of ability of the IwP to mentalise and thus not being able to verbalise how they are feeling. This seems to lead to a break down in TA and lead to a detriment in the care of the individual.

From interview with P06: seems to give an example of no real reflection with regards what is going on underneath for this IwP - there is just a 'he needs to be detained theme'.

This seems to give an example of; the relationship is difficult, so I'll just focus on the risk/ function (more hardware rather than software).

From P09: Gives an example of a difficult and emotive situation whereby the member of staff feels (emotionally) that they may be partly responsible for the consequences of a suicide attempt, even though logically they know it was not in their control and that they had done what they could. It gives an example, of not engaging in the more difficult conversations, maybe because he is anxious about what the family would say if they were to reveal their true feelings. This participant often uses the phrase 'they were always respectful', I wonder how afraid he is should they ever not be respectful. Increased anxiety appears to have lead to an avoidance to further discuss this difficult conversation and seems to lead to a more 'guarded' relationship.



## Appendix 9: Thesis protocol



THE UNIVERSITY  
of EDINBURGH



**Study Protocol:** How do staff working with individuals with Psychosis and the service-users themselves make sense of the difficulties associated with Psychosis? How does this impact the care given and how can 'mentalization' help us to understand how and why this might happen.

**Protocol Author:** Laura Corfield

### List of Abbreviations

GT	Grounded Theory
AMHS	Adult Mental Health Services
CAMHS	Child and Adolescent Mental Health Services

### Background

#### *Models of care when working with individuals with Psychosis*

Mental health policies promote the importance of patient-led collaborative care (National Service Framework, 1999; NICE, 2014). Despite this, individuals with Psychosis can be excluded from important treatment decisions (Byrne & Morrison, 2014; Hamann et al., 2008; Hamann et al., 2011) ultimately resulting in service-user disengagement (Hutton & Morrison, 2013). Further evidence supporting this comes from a recent review of the crisis and contingency plans developed for individuals with mental illness including Psychosis, this found that 85% of these plans contained no individualised information about the service user (Warner et al., 2006). This is of concern given the evidence showing that patient choice and patient centred care leads to improved service-user

outcomes. Thus, exploring how staff and service-users with Psychosis make sense of the difficulties associated with Psychosis and how this may affect the type of care given could offer an insight into staff and service level improvements that could improve overall outcomes.

### ***The link with mentalization***

Mentalization is a psychological process that may help us to explain why, despite professionals' best intentions; they can inadvertently revert to crisis-driven responses that may not be in individuals' best interests (Gumley & Schwannauer, 2006) and can lead to a break down in the therapeutic alliance. The 2016-2017 mental health act monitoring report found that there were 5422 more cases of compulsory treatment in Scotland this year than the previous year, demonstrating that crisis-driven responses are increasingly common, particularly for individuals with severe and enduring mental health problems such as Psychosis.

Mentalization is the reflective capacity of an individual to recognise mental states in oneself and others, and to think about interactions as motivated by these mental states e.g. thoughts, beliefs, feelings and intents (Allen & Fonagy, 2006). Mentalization offers an integrative framework that can be applied both theoretically and practically to enhance provision of care (Bevington et al., 2013). Effective mentalization can improve therapeutic alliances through staff members being more aware of the limits of their own understanding, considering more deeply the intentions and motivators behind the behaviours of the individuals they are working with. Increased understanding of the process by which this occurs may help to break down barriers, offering a de-stigmatising view of individuals experiencing Psychosis (Berry, Barrowclough, & Wearden, 2008; Berry, Shah, et al., 2008).

Mentalizing is a continuously changing process and can be easily reduced with the presence of emotional arousal (Fonagy & Luyten, 2009). High affect, interpersonal stress and burn out is frequently experienced by health care staff (Morse, Salyers, Rollins, Monroe-DeVita, & Pfahler, 2012; Rossler, 2012), with levels of burnout being especially high in staff working with individuals with psychosis (Savicki & Cooley, 1987). 'High risk' situations can heighten staff anxiety and feelings of responsibility leading to decisions that lack reflexivity and may not be in line with the patients' wishes (Gumley & Schwannauer, 2006) thus reducing the standards of care given (Ewers, Bradshaw, McGovern, and Ewers, 2002). Reduction in staff's capacity to mentalize can be displayed through criticism, hostility, blaming or focusing on rules and other processes, ultimately leading to a breakdown in the therapeutic relationship (Bevington et al., 2013). These responses may trigger disruptive memories of neglect and abandonment (Dozier et al., 2008) within the individual seeking help and can further reduce mentalizing ability (Gibson, 2006). Within outpatient settings, service interactions can become 'crisis-driven responses' that reinforce existing negative expectations of help-seeking and perpetuate the cycle of poor engagement (Gumley & Schwannauer, 2006).

Individuals with Psychosis seem to be a client group that particularly fall foul of not having their wishes fully incorporated within their care; as such this is an important area for further exploration. Research has found that poorer ratings of therapeutic alliance by individuals with Psychotic disorders was predictive of being admitted to a psychiatric hospital (both voluntarily and involuntarily) and having experience of self-harm and suicide attempts. Similarly, care coordinator ratings of the therapeutic relationship were predictive of increased hospital admissions (Farrelley et al. 2013; Priebe et al., 2011).

Research allowing us to gain further understanding into the processes that may impede the therapeutic alliance and lead to a decline in patient-centred care could have important implications for treatment outcomes.

### ***Mentalization from a service user perspective***

It is also important to consider the mentalization capacity of individuals with Psychosis as impairments can have major consequences for interpersonal functioning and the individual's ability to cope with distress (Semerari et al., 2003). It is believed that accurate mentalizing in individuals or families will lead to more positive relationships and a reduction in the negative impact of misunderstandings (Sharp & Fonagy, 2008). Additionally, effective mentalization can help develop insight into possible thought biases and reduce distress caused by the individual's experiences of Psychosis (Moritz et al., 2011; Ross et al., 2011). Within a help-seeking environment, evidence has found that individuals with Psychosis are especially alert to 'not being listened to' because of their 'symptoms' of psychosis (Hutton & Morrison, 2013), this coupled with high levels of emotional arousal can result in further reductions in mentalization capacity and relationships between staff and service-user can become fractured (Fine et al., 2007; Startup et al., 2008). Therefore, services which promote staff and service users' ability to mentalize will likely lead to improved therapeutic alliance (Hutton & Morrison, 2013) and treatment outcomes (Hartley et al., 2016). As such, this study aims to explore the way in which the difficulties experienced by individuals with Psychosis are understood from a mentalization perspective and how this may impact their care.

### ***Why we are including a measure of attachment***

The ability to mentalize develops through attachments with others (Fonagy, Gergely, Jurist & Target, 2002). Mentalization-based approaches have been developed to enhance engagement for hard to reach groups; engagement may be more difficult for these individuals as they often have poor mentalization skills because of insecure or avoidant attachment styles, thus making it more difficult for therapeutic alliances to be formed (Hartley et al. 2016). This is also true for individuals with Psychosis (Gumley et al., 2014). Additionally Berry et al. (2008) found lower levels of mentalizing in psychiatric staff who had insecure or avoidant attachment styles. This evidence suggests there is a link between mentalization, attachment and provision of care for individuals experiencing psychosis (Lysaker, 2011). Despite this, there is a lack of research into the mechanisms linking these, leaving a gap for further exploration (Gumley et al., 2011).

### ***Why further research exploring mentalization and models of care for supporting individuals with Psychosis is important.***

Most mentalization research has used staff self-reports which are open to social-desirability bias and a high level of self-awareness (Hartley et al., 2016). Research into mentalization and Psychosis is scarce; given the evidence demonstrating that both individuals with Psychosis and the staff working with them are vulnerable to lapses in mentalizing capacity and further evidence demonstrating the importance of individuals being able to effectively mentalize (Dozier et al., 2008; Sharp & Fonagy,

2008; Sharp et al., 2011), this is an important area for further exploration. Quantitative research may miss the subtle meta-level processes underlying individual and team actions. Studying ‘free speech’ could help uncover the processes and mechanisms involved in staff and service-user mentalization (Berry, Barrowclough, et al., 2008; Berry, Shah, et al., 2008) allowing insight into when and why mentalizing ability may be enhanced or compromised. Identifying this from both a staff and service user perspective, using a grounded theory approach, will develop a theory that could inform staff and service level improvements, offering insight into processes of recovery, models of care and ultimately improving treatment outcomes for service users.

### **Principal Research Questions**

How do staff make sense of Psychosis? What are the implications of this for models of care?

How do individuals who are receiving support for Psychosis make sense of their experiences of Psychosis?

### **Methodology**

#### ***Design***

This study will employ an ‘embedded mixed-methods’ approach (Creswell & Plano Clark, 2007), the primary emphasis will be on the qualitative element. An exploratory, qualitative design will be utilised to generate a grounded theory (GT) into the mentalizing ability of staff and service users across a variety of Adult mental health and Child and Adolescent mental health services. Data collection will be via semi-structured interviews with participants to access richly detailed, experiential accounts. A secondary quantitative data set will be gathered concurrently but will only be integrated following the qualitative analysis.

#### ***Ethics***

The ethical framework for protecting participants in qualitative research rests on autonomy, beneficence and justice, see Orb et al. (2000) for details. Whilst planning this study these considerations have been taken into account.

#### ***Participants***

Part one of the study will recruit a range of multi-disciplinary staff from a variety of AMH and CAMH services across NHS Lothian that work with individuals presenting with first-episode Psychosis. Part two of the study will recruit Individuals that are seeking support from both Child and Adult mental health NHS Lothian services for Psychosis. Services will include: Community mental health teams, inpatient wards, early intervention services and Intensive home-treatment teams.

***Inclusion criteria:***

Part one (staff)

- Qualified staff who do direct patient facing work with individuals experiencing Psychosis.

Part two (service users)

- Individuals who have experienced Psychosis/ possible symptoms of Psychosis.

***Exclusion criteria:***

- Individuals who do not have sufficient capacity to consent to the study.
- Children who are younger than 14 years old

Age range of participants: 14 years up.

***Sample size***

This study aims to recruit 12-15 staff participants and 12-15 service-user participants across the AMHS and CAMHS settings.

***Recruitment and gaining consent***

Team and research leads within the identified services will be approached and a rationale for the research given. This will be important for gaining the support for staff and service user recruitment.

*Staff-participant recruitment:* The researcher will offer to give an overview and rationale of the research at team meetings, and follow this up with phone/ email contact. The aim will be to motivate staff to take part in the research. Written information will be made available to any participant wishing to have further clarification around research aims and procedures. They will have at least 24 hours to look at the information before being asked to give their consent. Participants will be invited to meet with the researcher if they have any further questions about the research. Consent can then be taken and the assessment process can begin.

*Service-user recruitment:* During the aforementioned meetings staff will also be informed about service-user participation. Staff will be asked to use their professional expertise to identify potential service-user participants. They will be asked to consider whether the service-user participants meet the inclusion/ exclusion criteria, including whether they have the capacity to take part in the assessment process. The researcher will then ask the key worker or mental health professional that knows the individual well to approach them and ascertain whether they would be interested in participating in the study. If the service-user is interested and agrees to be contacted, the researcher will obtain all the relevant referral information needed. The researcher will then contact the service-user, ensure that they have received a copy of the information sheet (if not the researcher will ensure they receive one) and arrange an appointment with them. There will also be an independent volunteer situated either within the Edinburgh University Clinical Psychology Training Programme or NHS health board Psychology department for potential participants to contact with any queries or concerns regarding the project.

A face to face meeting will be arranged with the potential participant and the researcher to discuss any queries before obtaining the participant's consent, and will be arranged at least 24 hours after they have received the written information about the study. If consent is obtained, the assessment process can then begin within this meeting (participants will be aware of this).

Self-referrals will also be accepted for those who wish to participate in the study and who have been informed of the study via the posters. If any service-user participant self-refers, they will be informed that the researcher will need to contact their clinical care team and GP to inform them of their interest/participation in the study and to check details regarding inclusion/exclusion criteria. The treating clinician must also confirm that they have capacity to consent. Person identifiable information will not be collected about the service-user participant until they have provided verbal consent for the mental health professional to provide this to the research team. All potential participants will be given consent forms that are designed to ensure that each statement is read carefully before responding, this is done through creating multiple responses to be initialled by the researcher. Consent will be obtained from all participants for data collection and the likely outcomes of data analysis and dissemination.

*Specific issues related to gaining consent for participants or under 16 years of age:*

The process for gaining consent from participants who are under 16 years of age will be the same as detailed above. Separate information sheets and consent forms have been designed for participants who are under 16 years old to ensure their understanding of the purpose and processes involved in the research. Legally valid consent will be obtained from all participants, the process of direct informed consent will be applied for all individuals who are under 16 years of age. Parental assent for these individuals will not be obtained as only children who are deemed capable of providing informed consent will be recruited within this study.

**Data collection**

An open-ended interview approach will be used to gather the data. An interview guide will be developed to prompt the interviewer whilst keeping the line of questioning flexible, this is to avoid making assumptions about the nature of the data to be collected and so allow emergent themes to be identified and explored further.

Quantitative data will also be collected; self-report measures of attachment style and reflective functioning will be conducted. Reflective functioning will also be measured using a computerised tool that analyses the interview transcripts (see below for details).

Team and research leads within the identified services will be approached and a rationale for the research given. This will be important for gaining the support for staff and service user recruitment.

*Staff-participant recruitment:* The researcher will offer to give an overview and rationale of the research at team meetings, and follow this up with phone/ email contact. The aim will be to motivate staff to take part in the research. Written information will be made available to any participant wishing to have further clarification around research aims and procedures. They will have at least 24 hours to look at the information before being asked to give their consent. Participants will be invited to meet with the researcher if they have any further questions about the research. Consent can then be taken and the assessment process can begin.

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### ***Procedure***

Once informed consent has been gained the assessment process will begin.

#### **Self-report measures:**

During the assessment, all participants will be asked to complete self-report measures of attachment style and reflective functioning. Attachment style will be measured using the Experiences in close relationships – revised questionnaire (ECR-R; Fraley, Waller & Brennan, 2000). This is a 36-item measure of adult attachment style. The ECR-R measures individuals on two subscales of attachment: Avoidance and Anxiety. Reflective functioning will be measured using the reflective functioning scale (Fonagy et al., 2016), this is a brief, easy to administer screening tool that measures an individual's ability to mentalize. It is estimated that participants will take around 20-25 minutes to complete both measures.

#### **Qualitative interviews:**

Interviews will be audio recorded for the purpose of interview transcription and data analysis. Data transcripts will be anonymized prior to analysis. Data will be securely stored in line with University of Edinburgh and NHS Lothian procedures.

Data will be collected using face to face interviews, as it is believed that this will be the most effective way of allowing an in-depth exploration of the mentalizing ability of participants. In line with the GT approach, interview prompts rather than a full scripted interview will be developed as this will help the interviewer to follow the participants lead, engaging them in a flexible and evolving discussion. Prompts will be used to remind the researcher to ask about key areas which are believed to uncover participant mentalization but without blocking free-flow of new ideas. A more structured interview could lead to participant responses being limited by the researcher's preconceived ideas (Bryman, 2004). The other advantage of this approach is that it keeps the interviews discursive in nature whilst also allowing previously identified themes that have emerged from prior interviews to be followed-up and clarified (Bryman, 2004). The same question will be used to begin each interview; the question will be designed to open discussion and aid rapport between interviewer and interviewee.

Pilot interviews will be conducted prior to data collection so that the researcher can develop their interview style and further refine questions and prompts. In addition, after each set of three interviews, feedback will be sought from the research supervisors around the content and style of questioning being used, this is to ensure the interviewer remains flexible whilst still covering important



lines of enquiry. As has been mentioned previously, data collection and analysis will run in tandem so that new themes can be followed up in future interviews, where this is the case, questions designed to verify an emerging theory will be kept to the later parts of the interview. This is so that any new data/ themes will not be missed. After each set of three interviews are conducted, they will then be transcribed and analysed in parallel by the researcher. This is in-line with the constant comparative method of GT (Charmez, 2014; Strauss & Corbin, 1998) which allows emerging themes/ areas of interest to be followed up in upcoming interviews. Theory verification will be kept to the latter part of the interview to ensure that any new ideas/ themes that may arise in future interviews aren't missed. Prior to the interview being conducted, each participant will be reminded that all data will be anonymised. Completed transcripts will be imported into the data management system, NVivo 8 (QSR International, 2009-2010). Using this type of software within qualitative research has been shown to increase quality assurance and rigour within qualitative research (Bazeley, 2007).

## **Analysis**

A grounded theory framework will be utilised to analyse the data, due to its ability to generate a theory, offering an explanation as well as exploration into the mentalising ability of staff and service users across a variety of services (Birks & Mills, 2011). A social constructionist version will be used (Charmaz, 2014). Other qualitative methods were considered, such as ethnographic, phenomenological, narrative, and discourse analysis. Grounded Theory (GT) was chosen as the most appropriate method for this study as it offers the researcher opportunity to generate categories and hypotheses that are clear enough to be readily implemented in both qualitative and quantitative approaches (Glaser & Strauss, 1967). As such, the mentalizing ability of staff and service users may have implications in further research and clinical practice increasing its overall impact. In addition, GT doesn't see researcher bias as a 'limitation', but rather the researcher reflects and accounts for bias as part of the data analysis (Charmaz, 2014; Strauss & Corbin, 1990). This seems particularly pertinent given the topic of research being related to reflective functioning. Grounded Theory allows the researcher to present a transparent account of their decision making within data analysis and so adds to the credibility of the findings (Strauss & Corbin 1990). This will ensure that decisions remain close to the data, by starting at concrete descriptive analysis and only then moving towards more abstract levels of analysis.

The CRF assessment system (Computerised reflective functioning; Fertuck et al., 2012) will also be conducted on the interview transcripts. This utilises an empirically driven, computerised, text analytic approach to measure an individual's capacity to mentalize. This will give an additional and objective measure of reflective functioning, based on the content of the interview scripts, which will further enhance the data analysis.

## **Quality in research**

To ensure the quality and validity of the qualitative data, the quality criteria as specified by Birks and Mills (2011) will be followed. This considers researcher expertise, methodological congruence and procedural precision. To maintain self-awareness the researcher will have regular supervision and keep a reflective journal; this is to ensure they adhere to the GT process and maintain clarity as to the

purpose of the research. Yardley's (2000) framework for quality assurance in qualitative research will also be followed.

### ***Sensitivity and context***

To consider theoretical context, the researcher will conduct a literature review into mentalization processes and reflective functioning of both staff in mental-health care settings and service-users seeking support for mental health difficulties, in particular, Psychosis. This will aid a more thorough analysis and subsequent interpretation of the data. The researcher must be able to pursue lines of enquiry that actively contradict their own theoretical understandings; to aid this process the researcher will follow up new ideas with the participants to get their views and opinions and compare them to their own. It will be important to be aware of and explore how the socio-cultural context will impact the data. For example, lack of beds within acute inpatient wards may result in the staff member feeling an increased perceived pressure; this could impact upon their mentalization ability/ ability to reflect upon this in interview. The relationship between researcher and participant must also be considered. The researcher role as a trainee Clinical Psychologist may have an impact on staff responses during the interview. This could, for example, lead to staff wanting to provide 'useful responses' or staff altering responses due to feeling their practice is being evaluated. This may be dependent upon a variety of internal and external staff factors, including staff profession. An awareness of the power dynamic between the researcher and participant is also important as this may impact the responses given. Service user participants may feel concerned that there will be consequences depending on the responses that they give during the interviews – careful consideration must be given to ensure they know that there will be no negative repercussions as a result of their participation. As such, careful consideration to the interview process and questions asked will be given to aid rapport building and reduce feelings of threat/ assessment. In addition, a range of demographic data, alongside quantitative data, will be collected for each participant so that other emerging patterns can be identified.

### ***Commitment and rigour***

Commitment can be shown through the academic and clinical training and experience of both the researcher and research supervisors. To ensure rigour (a comprehensive enough data collection and analysis to produce meaningful results), participants will continue to be interviewed until the data is fully saturated. To achieve this a large enough sample size is required. Yardley (2000) suggests that to achieve a comprehensive understanding around the topic area, triangulation of results is required; quantitative data is being gathered to further enhance this process. In addition, coded transcripts, memos and diary entries will be kept so that the decision-making process is explicit, sections of coded transcript will also be checked by the supervisor so that more than one view is given. Participants will also be invited to comment on their views of the analysis and interpretation of results.

### ***Coherence and transparency***

To demonstrate a coherent fit between the theory and method the findings will be comprehensively reported with feedback sought out from the participants and the research supervisors throughout. This is to ensure that the developing theory is meaningful to the participants involved. Transparency means giving a clear description of what happened during the research and what led to the decisions

being made (Yardley, 2000). To aid this process the researcher will keep a reflective diary, identifying how their previous experiences have influenced the assumptions made regarding participant responses. Memos and journaling will allow the researcher to reflect on any emotional reactions during the interview process and how these may impact upon future interviews and analysis. Transparency will also be achieved through a detailed write-up of the research process with all data and analysis being kept for there to be an audit trail.

### ***Impact and importance***

One of the benefits of the GT methodology is that findings can be clinically applied within research, practice and training. Therefore, the findings will have implications for future practice and service delivery.

To ensure impact of the findings, results will be disseminated as a journal article. The results will also be presented to the services where participants took part as well as at national conferences and on the wiki platform.

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